

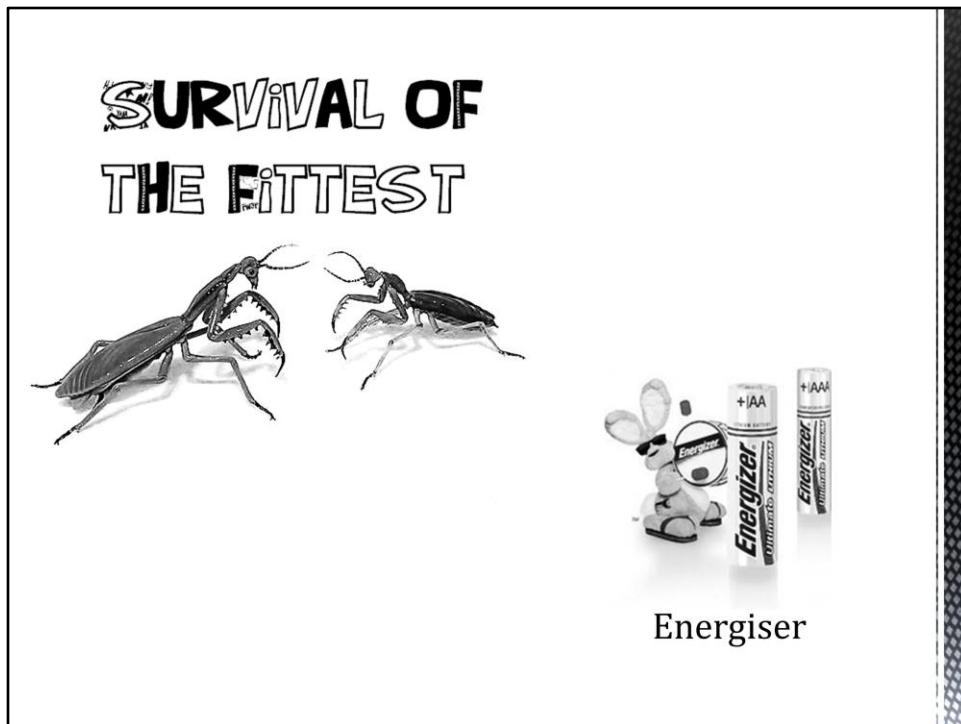


### **Notes for the Facilitator:**

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### Notes for the Facilitator:

The purpose of an energiser is to get the audience excited. Energisers are different from starters in that they have little to do with the actual content of the workshop. Their sole purpose is to get people energised for the workshop ahead.

- Ask each audience member to take a sheet of tissue and place it in their pocket or their sleeve. It should be clearly visible to all.
- Now inform the audience that the tissue represents everything the person needs to survive. It represents his/her food, shelter, emotional support, and creative well-being. If someone takes it away *they will die*.
- Be sure not to tell the audience anything else.
- Count to three and say, "Go!"
- The natural instinct of the audience will compel them to take away the tissue paper that belongs to someone else.
- After the chaos has settled down a bit remind the audience of your instructions above. Remind that at no point did you ask them to take someone's else's tissue.
- Ask them to think about *why* they were so eager to take away the tissue even though they knew it represented everything the person needed to survive.
- Ask them if it wouldn't have been infinitely better if they had *all* survived.

- **To examine who we are as a species**

- **To analyse what it means to have a shared humanity**

**Objectives**



**Notes for the Facilitator:**

Share the objectives with the audience.

## WHO ARE WE?

It's quite subtle. Nearly imperceptible. Not where we might think of looking first: how we see ourselves—our identity—shapes our future as a species. So let's tell a story about ourselves—let's build a cultural identity that moves us to dream bigger, learn faster.... go places, evolve into something even better.

### Introductory Video

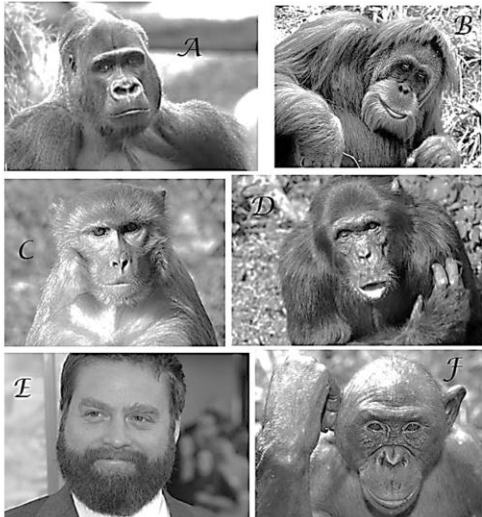


### Notes for the Facilitator:

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).



Which of the images below is the odd one out? Say why.



**Starter Activity:**  
Odd one out

### Notes for the Facilitator:

The aim of the activity is to get the audience thinking about man's place in the animal kingdom and his relationship with the rest of the biosphere.

Different individuals may choose different images for different reasons as their 'Odd one out.' This is fine, as long as they can justify their choice.

For instance, some may say humans are the odd one out, because we're the only one that have travelled to space.

Others may say the Orangutan is the odd one out because it lives predominantly in the trees.

Others may say the rhesus monkey is the odd one out because it's the only primate in the selection of images with a tail.

A: Mountain Gorilla; B: Orang-utan; C: Rhesus Monkey;  
D: Chimpanzee; E: Human; F: Bonobo



5 min. prep time | 5 min. presentation time

- Group 1: discuss and present what it means to be human.
- Group 2: discuss and present the good humans have done.
- Group 3: discuss and present the meaning of "cultural learning."

### Activity 1: Mini Presentation



#### Notes for the Facilitator:

- Ensure groups are focussed on the task.
- Remind them to be conscious of the time.
- Ensure that a flipchart and whiteboard markers are available.
- Students take 5 minutes to discuss and prepare their flipchart paper.
- They then have 5 minutes to present their ideas to the rest of the audience.



10 min. prep time | 5 min. display time

**Use resource sheet 1a:  
Who Are We?**

**Create a poster that  
captures the essence of  
the extract.**

**Activity 1:  
Designing a  
poster**



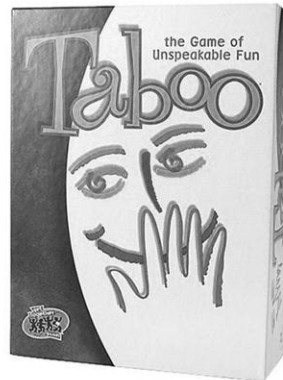
**Notes for the Facilitator:**

Ensure there are enough copies of resource sheet 1a

**In pairs, discuss what you've learnt in the last hour but you are not allowed to use the following taboo words:**

*Humans, Species, Project*

Plenary:  
Taboo




**Notes for the Facilitator:**

In pairs, audience members speak to each other about what they've learnt from the workshop, but they are allowed to use the taboo words: *Humans, Species, and Project*

**Create a 2-min.  
movie-trailer  
introducing humans  
to an alien species.**

**(Use either Animoto,  
MovieMaker,  
GoAnimate!, or  
iMovies)**



Extension  
Activities

**Notes for the Facilitator:**

The extension activities are for those participants who are keen to engage with the topics covered in the workshop.

It is not mandatory for them to do it, but encourage them to give it a shot.

Read the HUMAN project  
app content on:

*What should the purpose of  
our species be.*



Reading task in  
prep for next  
week

**Notes for the Facilitator:**

Encourage audience to come prepared for the next workshop having read the appropriate material from the app. If they don't have a smart phone, then inform them that the PDF version of the app content is available for download.



**Notes for the Facilitator:**

Remember to thank the audience for their participation and their enthusiasm. Let them know you look forward to seeing them again the following week.



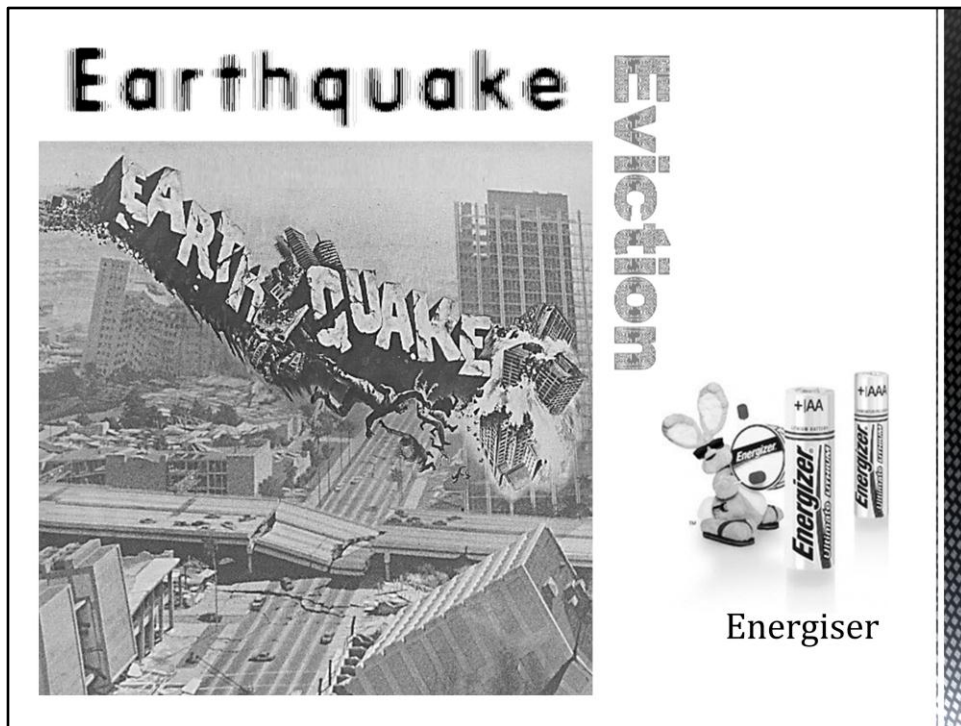
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### Notes for the Facilitator:

1. One group member stands alone to start, the rest of the group members need to join groups of three.
2. The groups of three have two people making a house with their hands and one person (the tenant) standing underneath.
3. The lone person calls either "Eviction!", in which only the tenants must move out and find a new house. The people representing the houses remain where they are. Or, the person may call "Earthquake!", in which all houses collapse and everyone must form a new threesome of house and tenant. (The tenants remain where they are).
4. Either way, the lone person tries to get into one of the threesome, so the person left becomes the new "caller."

- Modified from the Holden Leadership Centre

- **To evaluate the purpose of humans**

- **To distinguish between being and becoming**

Objectives



**Notes for the Facilitator:**

Share the objectives with the audience.

Arrange in order of  
increasing importance



Starter Activity:  
Odd one out

**Notes for the Facilitator:**

- Cut out the labels in resource sheet 2a, jumble them up and give them to participants.
- It would be useful to have many sets. (1 set for every group of four participants would be ideal)
- Once they've arranged it, ask them to justify why they arranged it in that order. They may pair up with another group for this.

**What should the purpose of our species be?**

The HUMAN Project should be the ultimate infinite game. Let's play it to keep playing... beyond our individual deaths, beyond the end of our sun, maybe even beyond the end of our universe.

Introductory  
Video



**Notes for the Facilitator:**

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).



2 min. prep time | 5 min. discussion time

**In groups make a list  
of things that  
humans have  
accomplished over  
the last 10,000 years.**

**The group with the  
biggest list wins.  
(Chocolates for  
reward)**

Activity 1:  
List-o-mania



**Notes for the Facilitator:**

Self-explanatory.

Try and enthuse the audience to be competitive. Show them the chocolate reward as incentive.

The aim of the task is to highlight how much humans have achieved over the millennia and how we are a remarkable inventive, innovative, creative and collaborative species.



3 min. thinking time | 5 min. sharing time

**Think about/Reflect on  
where our species will  
be 10; 100; 10,000 years  
from now.**

**Pair up with a partner  
and discuss/clarify your  
views.**

**Share with the rest of  
the group.**

Activity 2:  
Think-pair-share



#### **Notes for the Facilitator:**

This task is mainly to encourage the audience to stop and actively think about where our species will be in the future.

Remind them that to put things in perspective it would be useful to wonder where we were in the past.

100 years ago, in 1913, the two world wars hadn't taken place, the Soviet Union didn't exist, landing on the moon was considered impossible, and there were no computers, mobile phones, iPods, iPads, jumbo jets, satellites, or the internet.

10,000 years ago we were just coming out of the last great ice age. None of the ancient civilisations of Egypt, Babylon, India, or Greece existed. Agriculture had not been invented. Writing had not been invented.



3 min. thinking time | 5 min. sharing time

**“To be or not to be,  
that is the question.”**

**What does it mean?**

### Activity 3: Literary Analysis



#### **Notes for the Facilitator:**

This activity is designed to enable the audience to make some cross-curricular links with Literature.

The quote is from *Hamlet*.

Hamlet says these words in a preamble to a long soliloquy about life and death. Here he is contemplating suicide.

The verb ‘to be’ means to exist. (It can be conjugated as: is, are, were, will be, is being, have been, had been, etc.)

Detailed analyses of the soliloquy may be found in Wikipedia and other sites like Cliff Notes and Spark Notes.



3 min. thinking time | 5 min. sharing time

## Read resource sheet 2b

**What is the difference  
between *being* and  
*becoming*?**

## Activity 3: Literary Analysis



### Notes for the Facilitator:

Being implies to simply exist. It has connotations of passivity and inaction – simply going with the flow.

Becoming, on the other hand; implies change and transformation. It has connotations of actively changing one's destiny and taking charge of the direction of one's future.

The Imaginary Foundation says, "To imagine is to perceive many potential futures, select the most delightful possibility, and then pull the present forward to meet it.."

Tease out from the audience what they understand by the expression, "To survive and to ascend." Ask them what it means to ascend. What does it mean to transcend? Transcend what? Transcend to where? Transcend how?


Should we transcend the human condition? Death is a key feature of the human condition, should we seek to transcend and overcome that?



Stewart Brand says, *'We are as gods and might as well get good at it.'*

**What could this statement mean and how would you respond?**

**What should our purpose as HUMANS be?**



Plenary:  
Provocation

**Notes for the Facilitator:**

Explain to the audience that Provocations is a Lateral Thinking strategy by Edward de Bono. It helps us move from a provocative statement to useful ideas.

We are often encouraged to “think outside the box” with no instructions for how to do so. Provocations is a process that enables you to exit the box with ease—and return with a compelling list of innovative ideas to consider.

Divide the room into groups and ask each group to discuss the Stewart Brand’s quote. Encourage them to analyse what they think it means and whether they agree or disagree with it and to justify their views.

Give them a few minutes to discuss and then ask them to share their ideas with others.

Stewart Brand is an American writer, best known as editor of the Whole Earth Catalog.

- Watch Jason Silva's video mash-up "Beginning of Infinity"
- Read a review of David Deutsch's *Beginning of Infinity* by Rohan Roberts on 'Phoebus Online.'
- Research Deutsch's concept of 'Jump to Universality'



Extension Activities

**Notes for the Facilitator:**

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It is not mandatory for them to do it, but encourage them to give it a shot.

Read the HUMAN project  
app content on:

*What can one human life  
mean?*



Reading task in  
prep for next  
week

**Notes for the Facilitator:**

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**Notes for the Facilitator:**

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# Human Knot Game



Energiser

## Notes for the Facilitator:

Participants stand in a circle and join hands. Keeping their hands joined, they move in any way that they want, twisting and turning and creating a 'knot'. They must then unravel this knot, without letting go of one another's hands.

It would be a good idea to ensure each group doesn't have more than 7-8 individuals.

- To recognise the meaning of one life

- To interpret and comprehend the meaning of infinity

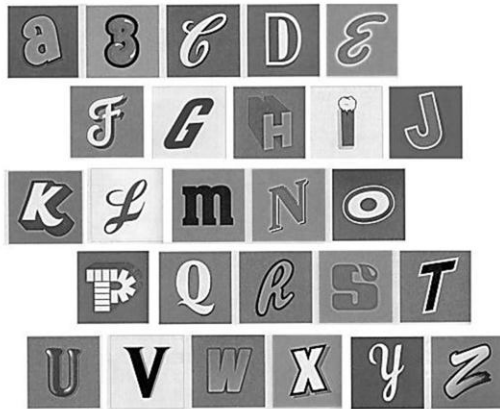
Objectives



**Notes for the Facilitator:**

Share the objectives with the audience.

Write down a key/related word  
related to the concept of infinity  
for as many letters of the  
alphabet as you can.



Starter Activity:  
A-Z

### Notes for the Facilitator:

Examples would be

- A: Astronomical / alpha and omega
- C: Cardinal Numbers
- E: Eternity
- F: Fractals
- H: Hydrogen atoms
- L: Lemniscate (the symbol of infinity:  $\infty$ )
- M: Mandelbrot sets
- P: Prime Numbers / Pi
- S: Strings and superstrings
- U: Universe
- T: Time

Remind the audience that infinity means *without limit* or *without end*. This is different from very large numbers. A trillion, trillion, trillion, trillion is still finite.



### **One Human Life**

My life is not an end in and of itself. My life is a contribution to the ongoing human project.

### **Introductory Video**



### **Notes for the Facilitator:**

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).

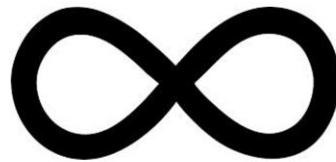


5 min. research time | 10 min. sharing time

## Research and Present

1. Zeno's paradox
2. Infinite Monkey Theorem
3. Hotel Infinity
4. Fractals (Mandelbrot Sets)
5. Pi

Activity 1:  
Mantle of Expert



### Notes for the Facilitator:

The above topics are related to the concept of infinity. The Mantle of Expert strategy works by allowing one group do their research on the subject and then present it to the rest of the class. Different individual in each group can research different areas of the topic they've been assigned.

For example,

#### **Group 5: Pi**

One individual in group 5 may research the meaning of Pi.

Another individual in group 5 may research the applications of Pi in everyday life or in technology.

Yet another individual in group 5 may learn about how long we've known about Pi.



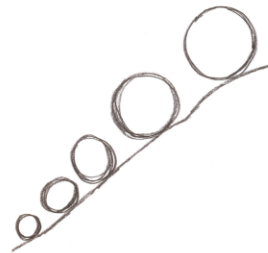
3 min. writing time | 5 min. sharing time

**Group 1: Make a list of things you'd do if you could live for infinity**

**Group 2: Make a list of things humans have achieved by collaborating over many generations.**

**Group 3: Make a list of things humans should focus on if our species could exist forever.**

**Activity 2:**  
Snowballing



### **Notes for the Facilitator:**

Each of the three groups gets 2 minute to write down the above points.

At the end of 2 minutes, ring a bell,

Group 3 moves to group 2

Group 2 moves to group 1

Group 1 moves to group 3

Each group gets a minute to add to what has already been written.

At the end of 1 minute, ring a bell,

Group 3 moves to group 1

Group 2 moves to group 3

Group 1 moves to group 2

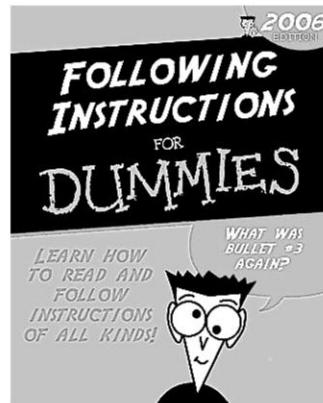
Each group gets a minute to add to what has already been written.

At the end of the next minute all the groups return to their original sheet of paper to see what others have added.

It would be useful to have A3 size papers for this activity.

**Write out a set of instructions on**

**how humans can solve our problems and start to dream big dreams for our species.**



**Plenary:**  
**Instructions for Dummies**

**Notes for the Facilitator:**

Hand out resource sheet 3a.

Write out a set of instructions on how humans can solve our problems and start to dream big dreams for our species.

This activity is meant to be done individually.

- Watch *The Cosmos: Universe or Multiverse?* on YouTube
- Write an article or blog post about the meaning of one life and how what we do in our lifetime can have an impact on other lives.



Extension Activities

**Notes for the Facilitator:**

The extension activities are for those participants who are keen to engage with the topics covered in the workshop.

It is not mandatory for them to do it, but encourage them to give it a shot.

Read the HUMAN project  
app content on:

*We are Matter*



Reading task in  
prep for next  
week

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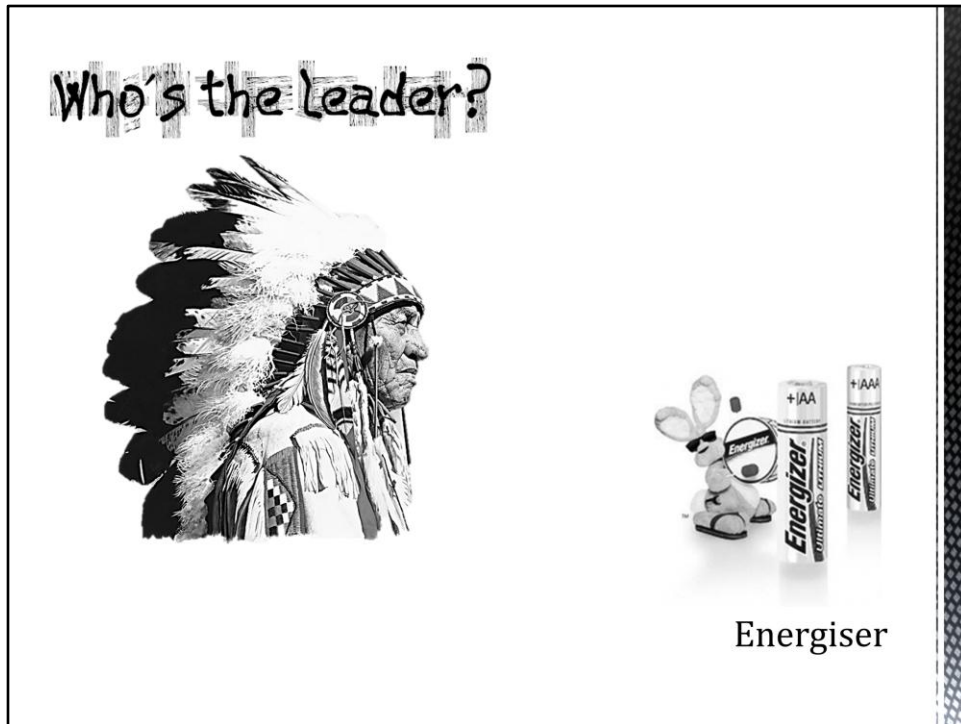
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**Notes for the Facilitator:**

Participants sit in a circle. One person volunteers to leave the room. After they leave, the rest of the group chooses a 'leader'. The leader must perform a series of actions, such as clapping, tapping a foot, etc, that are copied by the whole group. The volunteer comes back into the room, stands in the middle and tries to guess who is leading the actions. The group protects the leader by not looking at him/her. The leader must change the actions at regular intervals, without getting caught. When the volunteer spots the leader, they join the circle, and the person who was the leader leaves the room to allow the group to choose a new leader.

- To recognise our material connection with the universe

- To comprehend what  $E=MC^2$  means

Objectives



**Notes for the Facilitator:**

Share the objectives with the audience.

## **WE ARE MATTER.**

In cosmic terms, we are just tiny clumps of matter. Like all matter, we are subject to the forces of cosmic evolution. Is our fate then inextricably tied to the fate of our Universe? Not necessarily, after all we are no ordinary clumps of matter.

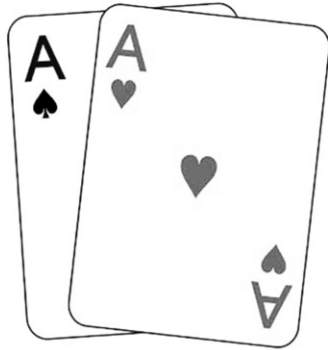
### **Introductory Video**



### **Notes for the Facilitator:**

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).

Find your partner who has your  
matching term.



**Starter Activity:**  
Match the term

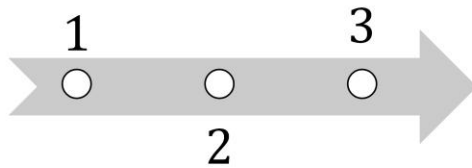
**Notes for the Facilitator:**

Cut out the choice of word pairs in resource sheet 4a. Ensure they are jumbled up before they are handed out.



2 min. **reading** time | 5 min. **viewing** time

**In groups, convert the information in resource sheet 4b into a timeline or a flowchart.**



**Activity 1:**  
Conversion

**Notes for the Facilitator:**

Encourage the participants to draw and use text to create their timeline/flowchart.



7 min.

Evidence for  
**THE**  
**BIG BANG**


**On the count of 3, search for the  
evidence hidden around the room  
and stick it on the whiteboard.**

Activity 2:  
Seek the answer




**Notes for the Facilitator:**

Ensure the pieces of evidence in resource sheet 4c are cut out and hidden under the chairs of the room before the workshop starts.




3 min. writing time | 5 min. sharing time



$$E=mc^2$$

What does it mean?

Activity 3:  
Reward the expert



### Notes for the Facilitator:

$E=mc^2$  is Einstein's famous equation – possibly the most famous equation of all.

E stands for energy

M stands for mass

C stands for the speed of light

It simply means that matter and energy are the same – matter and energy are inter-convertible. Energy can be changed into matter (e.g. nuclear fusion) and matter can be converted into energy (e.g. nuclear fission)

Give a reward to the participant who gives the best explanation.



3 min. writing time | 5 min. sharing time

Watch the two short  
musical videos closely  
and make a mental note  
of the lyrics




Plenary:  
Symphony of  
Science



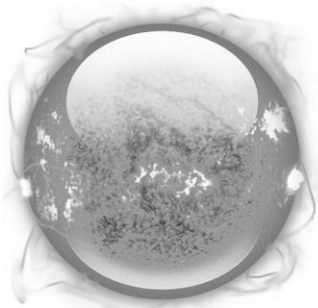
#### Notes for the Facilitator:

Symphony of Science is a project from John D. Boswell, aka melodysheep, which aims to bring scientific knowledge and philosophy to the public, in a novel way, through the medium of music.





3 min. writing time | 5 min. sharing time

In groups of three explain to each other what it means to say *"we are stardust"* and *"we are all connected"* from a scientific perspective.



Plenary:  
Triads



### Notes for the Facilitator:

#### **We are stardust:**

Shortly after The Big Bang, the only two elements that were around were hydrogen and helium. These clumped together to form the first generations of stars. Due to the extreme gravity in the core of these stars hydrogen and helium fused to form heavier and heavier elements (all the other elements in the periodic table – from gold to iron to molybdenum). When these supermassive stars went nova the explosion released all these heavier elements into the rest of space. Slowly the next generation of stars formed from the enriched guts of these exploded stars.

Our sun is a third generation star. All the atoms and molecules that make up our solar system were once part of a star (or stars) in the distant past that died and exploded. The atoms in our body were created in the furnaces of stars. We are literally stardust.

#### **We are all connected:**

The most abundant elements in the universe are Hydrogen, Helium, Oxygen, Nitrogen and Carbon. The most abundant elements in our body are the same (with the exception of Helium which is chemically inert). There is nothing exceptional about what we are made of. We are connected at a material level with all matter in the universe.

Also, at the time of the big bang, all matter would have been quantum entangled. Another reason to believe we are all connected. All life on earth is based on DNA. All humans have 23 chromosomes. Biologically, we are connected with other humans, and all life on our planet.

### **Read about**

- **Carl Sagan**
- **Lawrence Krauss**
- **Richard Feynman**
- **Neil deGrasse Tyson**



Extension  
Activities

### **Notes for the Facilitator:**

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Read the HUMAN project  
app content on:

*We are Life*



Reading task in  
prep for next  
week

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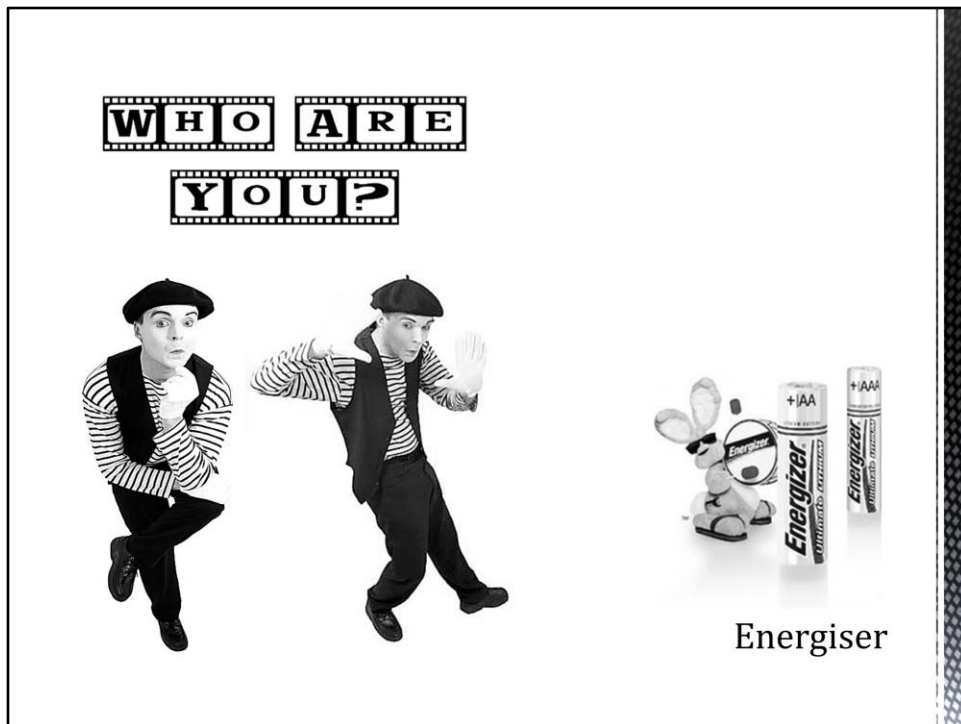


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**Notes for the Facilitator:**

Ask for a volunteer to leave the room. While the volunteer is away, the rest of the participants decide on an occupation for him/her, such as a driver, or a fisherman. When the volunteer returns, the rest of the participants mime activities. The volunteer must guess the occupation that has been chosen for him/her from the activities that are mimed.

- To discuss what constitutes life.

- To consider the features of extra-terrestrial life

### Objectives



#### **Notes for the Facilitator:**

Share the objectives with the audience.

## **WE ARE LIFE.**

In biological terms, we are a complex form of life. Like all life, we harvest matter and energy from our surroundings. We rely on the energy of a star. Is our fate then inextricably bound to the fate of our star? Not necessarily, after all, we are no ordinary form of life.

### **Introductory Video**



### **Notes for the Facilitator:**

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).





**Notes for the Facilitator:**

In Pictionary participants are not allowed to speak. They may only use the whiteboard pen to draw the word.


The facilitator divides the room into two groups.

Group 1 nominates a person to draw the word assigned to him by the facilitator. As the person draws the word, his/her team members try to guess what the word is.

The facilitator keep track of the number of seconds. The aim is to guess the word in as short a time period as possible.



Once Group 1 guesses the word, the same process is repeated with group 2.

After a few rounds, the team with the least number of overall seconds wins.



10 min. prep time | 10 min. performance time

**In groups, create a radio infomercial in which you talk about what life is and what its features are.**  
You may use some of the content in resource sheet 5a



Activity 1:  
Radio  
infomercial

### Notes for the Facilitator:

Divide the audience into groups of 5-7

Give the resource sheet 5a (though inform them they are free to add material from their own knowledge)

They have ten minutes to prepare their radio infomercial about life. The infomercial mustn't be more than a minute and a half long.

Invite group 1 to announce their infomercial before the rest of the audience. However, ensure the rest of the audience have their backs turned (so that they can only hear what group 1 says and can't see them).

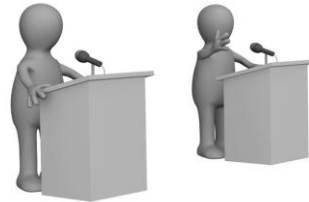
When group 1 is done the rest of the groups follow suit.



10 min. prep time | 10 min. debate time

### **Motion:**

**“This house believes that  
seeds are a form of life.”**



**Activity 2:**  
Debate

### **Notes for the Facilitator:**

There will not be time to do a formal debate. This is more an informal debate that requires the participants to think about what is living and what isn't.

There are many ways to do an informal group debate.

One way to do it is to divide the class into two opposing groups and get them to face each other off.

Each team gets the opportunity to make one point and the other team rebuts it or counter-argues against it.



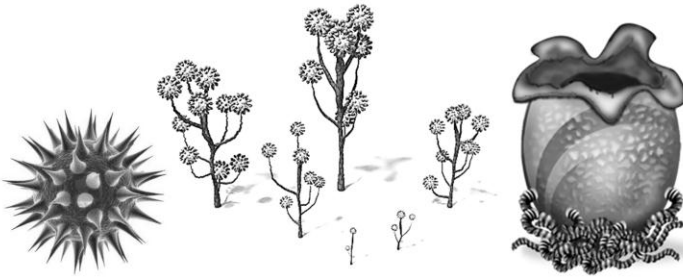
3 min. writing time | 5 min. sharing time



In pairs, draw a mind map of some of the features of possible life on an alien planet.

Be prepared to justify your views.

Plenary:  
Spider Diagram /  
Mind Map



### Notes for the Facilitator:

Encourage participants to be creative and think freely – but to try and base their thinking on some degree of scientific plausibility too.

- **Research about SETI**

- **Write either a blogpost, or a magazine article, or, an argumentative essay justifying the search for extra-terrestrial life.**

- **Make a painting/sketch of what alien life might look like. (Don't be inspired by Hollywood).**



Extension  
Activities

**Notes for the Facilitator:**

The extension activities are for those participants who are keen to engage with the topics covered in the workshop.

It is not mandatory for them to do it, but encourage them to give it a shot.

Read the HUMAN project  
app content on:

*We are Culture*



Reading task in  
prep for next  
week

**Notes for the Facilitator:**

Encourage audience to come prepared for the next workshop having read the appropriate material from the app. If they don't have a smart phone, then inform them that the PDF version of the app content is available for download.



**Notes for the Facilitator:**

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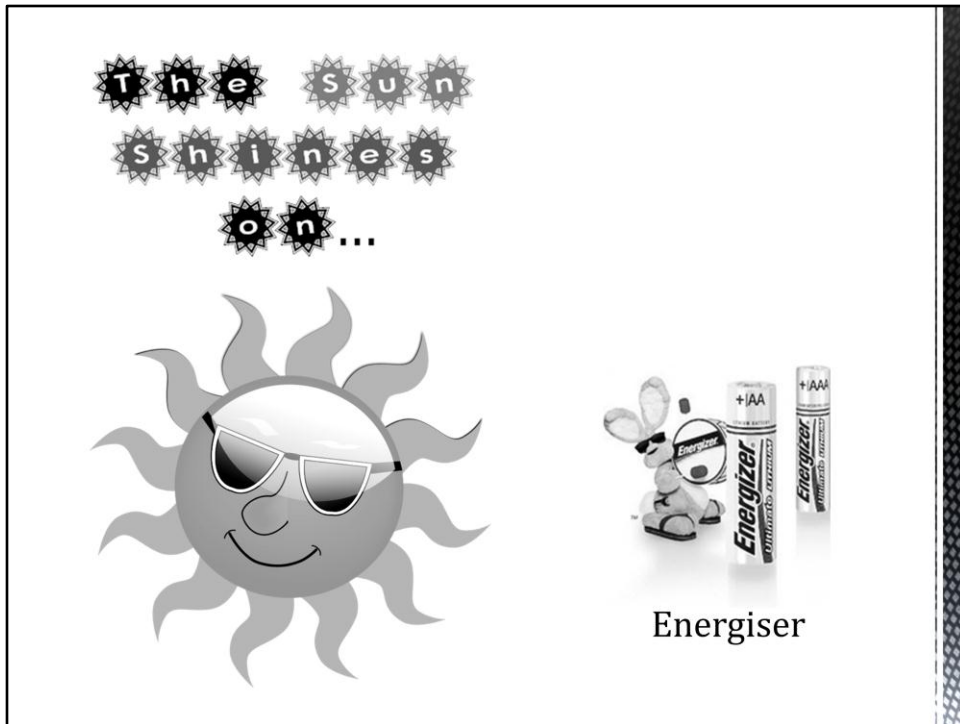
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### Notes for the Facilitator:

Participants sit or stand in a tight circle with one person in the middle. The person in the middle shouts out “the sun shines on...” and names a colour or articles of clothing that some in the group possess. For example, “the sun shines on all those wearing blue” or “the sun shines on all those wearing socks” or “the sun shines on all those with brown eyes”. All the participants who have that attribute must change places with one another. The person in the middle tries to take one of their places as they move, so that there is another person left in the middle without a place. The new person in the middle shouts out “the sun shines on...” and names a different colour or type of clothing.

- To discuss what we mean by culture
- To analyse the difference between genes and memes

Objectives



**Notes for the Facilitator:**

Share the objectives with the audience.

**We are Culture.**

We are a culturally  
learning species. Could we  
learn our way to the end  
of the 22nd century?  
Could we outlive our star?  
Could we prevail over  
entropy?

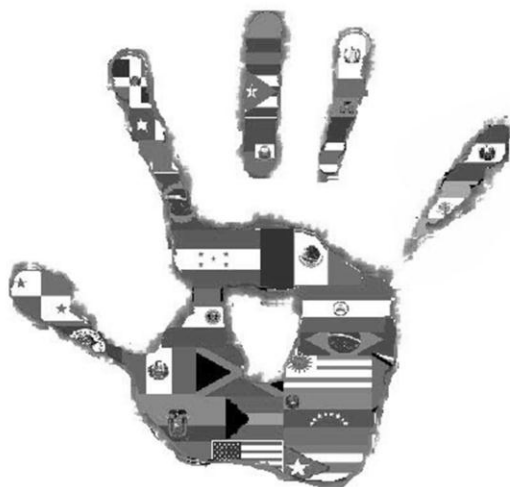
Introductory  
Video



**Notes for the Facilitator:**

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).

Use your mini-whiteboards to write your own definition of what **culture** is.

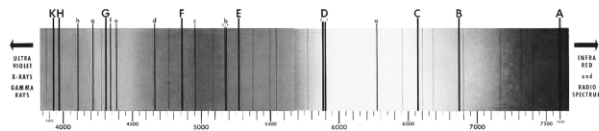


## Starter Activity: Definition

### Notes for the Facilitator:

Encourage participants to write their own definition of 'culture'. Be sure to inform them there is no right or wrong answer – just their own definition of culture.

## Activity 1: Spectrum of Agreement



### Intercultural Dialogue...


1. Is a waste of time; People should just talk to people from their own cultures
2. Is more important now than it was in the past
3. Means opening your mind and accepting that everyone is different
4. Is about having friends in different countries
5. Simply means exchanging information
6. Can cause problems but it can also have happy endings
7. Is impossible because everyone disagrees about food, religion, clothing, education etc.
8. Is for politicians, not for people like us
9. Means that everyone should communicate with someone from another culture at least once in their life.
10. Can be just two people talking or it can be hundreds of nations communicating
11. Means diluting cultures.
12. Is about showing people that everyone is the same on the inside
13. Is about helping people to understand immigration
14. Saves lives
15. Is too much effort because of all the different languages in the world
16. Involves teaching each others that stereotypes are misleading and dangerous
17. Is about treating the world as one big family

*From Connecting Cultures*


### Notes for the Facilitator:

Prepare A4 sheets with the words 'Strongly Agree' 'Not Sure' 'Strongly Disagree' and place them in three different areas of the room.


Display each statement and ask the participants to position themselves by one of the three headings.



10 min. prep time | 5 min. display time



Research on the internet and design an information brochure about the difference between memes and genes.



Activity 2:  
Information Brochure

### Notes for the Facilitator:


Divide participants into groups of five. Give them each an A4-sized thin-cardboard paper.


Remind them that they have only 10 minutes prep time. It would be advisable if each participant did a different task – the idea is to get them to work collaboratively. So one person may research information on genes and another person may fold/cut the cardboard paper into the shape they prefer for the brochure. Another person may start drawing/designing.

Encourage participants to be creative with their brochure.

At the end of ten minutes, each group displays their brochure and the audience votes for their favourite. for expediency, they may simply stand next to the brochure they like the most. (They may not vote for their own brochure).

Have a reward (like chocolate bars) for the team with the best brochure.


3 min. writing time | 5 min. sharing time




*"We are now at the beginning of infinity. Whatever is not prohibited by the laws of physics is possible."*

- David Deutsch

**What can it mean to be at the beginning of infinity? Think 500 years into the future – what can the human species achieve through rational memes, exponential growth in technology, and by culturally collaborating on a species level?**

**Plenary:**  
Group Discussion



### Notes for the Facilitator:

Encourage all participants to share their views.


David Deutsch goes on to say that, "We are at the beginning of infinity and will always be at the beginning of infinity." That's what *infinity* implies. We have infinite time to see the hopes dreams and ambitions of our species in particular and life in general play out.

Ray Kurzweil points out that the exponential progress in technology means that in the next 100 years we won't see 100 years worth of progress we'd see the equivalent of 20,000 years worth of progress.

We already have Google self driving cars and Google glass in the year 2013. What will things be like in the year 2053? Moore's law is limiting in that it only applies to the number of transistors on a circuit. However, the same principle may be applied to all information technologies, including decoding genes; temporal and spatial resolution of brain scans; chip speed, price performance; and miniaturisation...

The merger of biological and nonbiological intelligence, immortal humans integrated with software, and greater-than-human intelligence that expands outward in the universe at the speed of light – is that our destiny?

- Read about Ray Kurzweil's Six Epochs of Information Evolution
- Read about John Smart's Transcension Hypothesis
- Watch Jason Silva's video mash up on the 'Transcension Hypothesis'



Extension Activities

**Notes for the Facilitator:**

The extension activities are for those participants who are keen to engage with the topics covered in the workshop.

It is not mandatory for them to do it, but encourage them to give it a shot.



Read the HUMAN project  
app content on:

*Our Mental Frames*



Reading task in  
prep for next  
week

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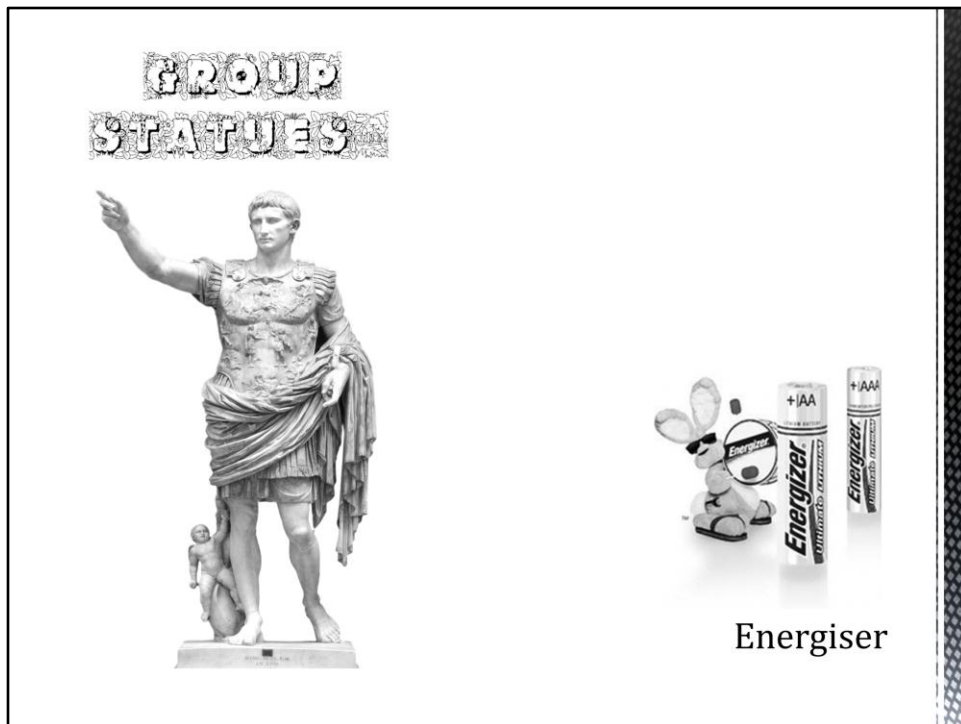


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**Notes for the Facilitator:**

Ask the group to move around the room, loosely swinging their arms and gently relaxing their heads and necks. After a short while, shout out a word. The group must form themselves into statues that describe the word. For example, the facilitator shouts “peace”. All the participants have to instantly adopt, without talking, poses that show what ‘peace’ means to them. Repeat the exercise several times.

Possible words to shout out:

Peace, war, fishing, golf, football...

- To highlight the challenges that could impact the survival of our species


- To discuss 2050 milestones for our species

### Objectives



#### **Notes for the Facilitator:**


Share the objectives with the audience.



**Existential Threats**

Global warming	Big Crunch
Nuclear holocaust	Andromeda Collision
Asteroid impact	Alien Invasion
Supernova	Super Volcano
Magnetic reversal	Genocide, A.I.
Pandemics	Mega-Tsunami
Alien invasion	Peak Oil
Grey goo	Dark Nebula
Biological warfare	Black Holes
Entropy	M.A.D.

**Starter Activity:**  
**Bingo**



### Notes for the Facilitator:

Ask participants to choose any 9 existential threats from the list and write it down on their bingo card.

The facilitator then calls out all the existential threats one after the other *at random*.

The facilitator informs the audience that there are 7 prizes up for grabs. Encourage participants to call out "Bingo" if they have ticked the appropriate rows or columns:

Top, middle, and bottom row

Left, middle, and right column

Full-house (All the names on the individual's card)

Be sure to have at least 7 rewards (chocolate bars should suffice).

If there are two participants who claim the same prize, the first person to say 'Bingo' gets the prize.



### Notes for the Facilitator:

Assign the numbers 1, 2, or 3, to each of the participants. Give them copies of page 23 in *the HUMAN project* e-book.

Group 1 reads about the Earth Wall

Group 2 reads about the Time Wall

Group 3 reads about The Abstraction Ceiling

While the participants are reading, the facilitator arranges the chairs in two concentric circles (with the chairs in the inner circle facing the chairs in the outer circle).

Once participants have read the text, they choose a chair. Earth Wall participants take the inner circle. Abstraction and Time wall participants take the outer circle.

When the facilitator says, “Start,” the participants share their understanding of what they’ve read with the person facing them.

After two minutes the participants in the outer circle move one seat to the right and the process continues for one or two more rounds till everyone has an idea of all 3 walls.

## 2045 – A new era for humanity

The main goals of the 2045 Initiative: the creation and realization of a new strategy for the development of humanity which meets global civilization challenges; the creation of optimal conditions promoting the spiritual enlightenment of humanity; and the realization of a new futuristic reality based on 5 principles: high spirituality, high culture, high ethics, high science and high technologies.



### Notes for the Facilitator:

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).




**10 min.**



00:01:11  
Cut to Kat in bed. At the sound of the alarm, her eyes snap open dramatically and she sits up abruptly out of the frame. Sound: Bouncy, comical music begins when Kat opens her eyes, and the sound of the alarm.



00:01:12  
Kat pops into frame, as though she's sat up out of bed and into the shower. She washes her hair without looking at her hands once as the steam fills the screen. Sound: Spurring bottle, water running, music con't.



00:01:13  
Cut to a closet full of dresses. Kat twirls past, pausing to sway in her dress as though dancing. She moves offscreen. (her movements are bouncy and quick) Sound: swooshing cloth, music con't.



00:01:14  
Cut to closed front door. Kat bursts through the door, waving over her shoulder. She prances offscreen and the door slams behind her. Sound: door opening and slamming closed, a cheerful giggle, music con't.



00:01:15  
Cut to an empty forest path. The shot is static as Kat skips past, followed by the forest creatures. They all exit the shot. Sound: Bouncing and animal sounds, music con't.



00:01:16  
Cut to a close up of Kat's face. Slow zoom out as the music comes to a dramatic finish. Sound: music end.

## Activity 2: Storyboard

**Individually, think of one milestone for the year 2050.**

**Draw a sequence of events storyboard on how we might achieve it.**

### Notes for the Facilitator:

Remind the participants this is not a test of their drawing skills but rather a task to encourage their creativity.

Stick figures are fine.

The idea is to think of *one* milestone for 2050 (like flying cars, or Humans on Mars, or uploading human memories into computers) and draw the sequence of events that will make it happen.

Participants are free to add dates and dialogue, if they wish.

Remind them that they only have 10 min. so a sense of urgency is important to complete the task.



5 min.

**What if** we hadn't done today's lesson?

**What if** you weren't allowed to know what we've learnt today?

Plenary:  
What if...?



**Notes for the Facilitator:**

Elicit responses from participants about their personal responses to the above two statements.

- Read about Ray Kurzweil's predictions about events that will lead to the technological singularity.
- Visit [2045.com](http://2045.com) and read their vision critically.
- Consider the pros and cons of The Venus Project



Extension  
Activities

**Notes for the Facilitator:**

The extension activities are for those participants who are keen to engage with the topics covered in the workshop.

It is not mandatory for them to do it, but encourage them to give it a shot.

Read the HUMAN project  
app content on:

*How we Sustain Ourselves*



Reading task in  
prep for next  
week

**Notes for the Facilitator:**

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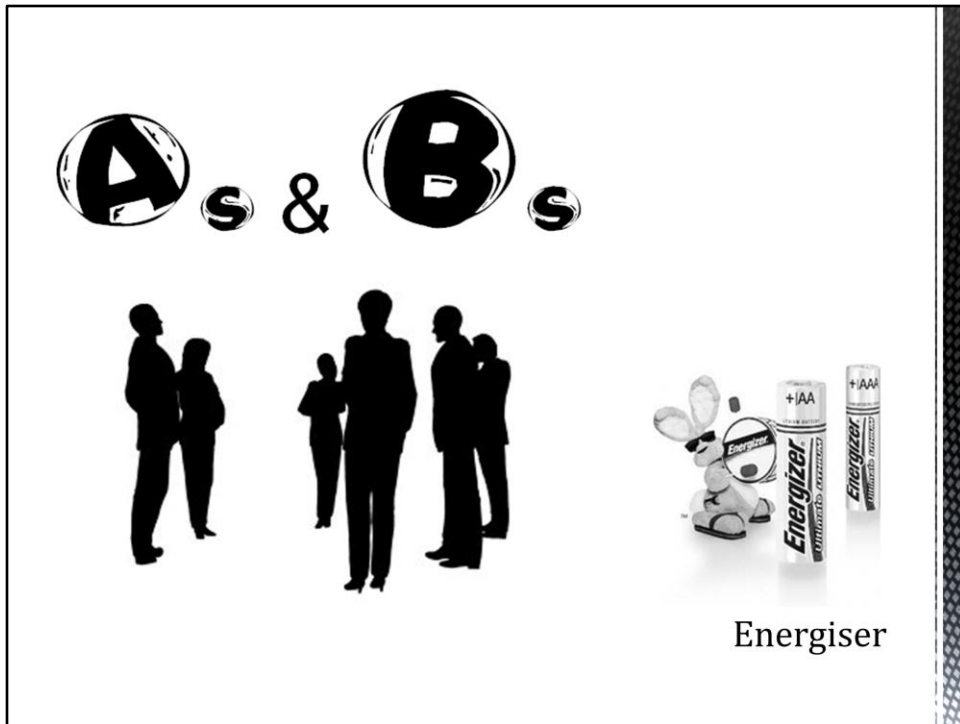


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**Notes for the Facilitator:**

Ask everyone to choose silently someone in the room that is their 'A' person and another person who is their 'B' person. There are no particular criteria on which to base their choices – selections are entirely up to individuals. Once everyone has made their choices, tell them to get as close to their respective 'A' person as possible, while getting as far away from their 'B' person. People can move quickly but should not grab or hold anyone. After a few minutes, participants stop and reverse the process, getting close to their 'B' persons and avoiding their 'A' persons.

- To identify the issues relating to sustainability.

- To create a manual/charter for Club EARTH 2050

## Objectives



### **Notes for the Facilitator:**

Share the objectives with the audience.





**Notes for the Facilitator:**

Divide participants into groups. Each group creates a tableaux of one of the forms of energy: Wind energy, Solar Energy, Tidal Energy, Nuclear energy, Zero-point energy, Fossil Fuels

(Zero-point energy is the energy possessed by the very fabric of space even in a total vacuum).

### **Pale Blue Dot**

This excerpt from Carl Sagan's book, *A Pale Blue Dot* was inspired by an image taken, at Sagan's suggestion, by Voyager 1 on February 14, 1990. As the spacecraft left our planetary neighbourhood for the fringes of the solar system, engineers turned it around for one last look at its home planet. Voyager 1 was about 6.4 billion km away, when it captured this portrait of our world.



### **Notes for the Facilitator:**

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).



25 min. prep time

Use the resource sheet 8b to create an earth manual for Club EARTH 2050.

Focus on :

- Mission Statement
- Club Members
- How the governors will be chosen
- Issues to tackle
- How to amend the charter



### Activity 1: Earth Manual

#### Notes for the Facilitator:

Hand out resource sheet 8b and ask participants to create an earth manual for Club EARTH 2050.

They focus on :

Mission Statement

Club Members

How the governors will be chosen

Issues to tackle

How to amend the charter.

“You are human. Conduct yourself wisely.” These could be the first words of our evolving Earth Manual. After 10,000 years of trial and error and our recent advances in Earth systems science, we know quite a bit. We can now use our understanding to design new sets of smarter practices with fewer unintended consequences, some to enable us to use Earth’s physical and biological processes wisely (e.g., how much fish can we take without causing collapse in fish stocks in our oceans), some to create our own parallel systems (e.g., fish farming). Our Earth didn’t come with a manual but now we’re smart enough to make one. By 2050 we should have gone through quite a few major revisions.



5 min. presentation time per group

**Present your charter  
for Club EARTH 2050  
to the rest of the class.**



Plenary:  
Presentation




**Notes for the Facilitator:**

In groups, participants present their charter to the rest of the audience.

5 min. per group

Ensure all participants in a group speak.

- Visit [earth2hub.com](http://earth2hub.com) and critically review its contents.
- View *Earth 2.0: Initialisation* on YouTube



Extension Activities

**Notes for the Facilitator:**

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Read the HUMAN project  
app content on:

*How we resolve conflicts*



Reading task in  
prep for next  
week

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# Tide's in, Tide's out



Energiser

## Notes for the Facilitator:

Draw a line representing the seashore and ask participants to stand behind the line. When the facilitator shouts "Tide's out!", everyone jumps forwards over the line. When the leader shouts "Tide's in!", everyone jumps backwards over the line. If the facilitator shouts "Tide's out!" twice in a row, participants who move have to drop out of the game.

- To differentiate between rational and irrational memes.

- To identify reasons for human conflicts and means of resolution

- To design a Peace Meme Collaborative

## Objectives



### Notes for the Facilitator:

Share the objectives with the audience.



5 min. presentation time per group

**In Groups, make a list of all  
the reasons for human  
conflict.**



**Starter Activity:**  
Lists

**Notes for the Facilitator:**

Remind participants they only have three minutes for this task – so try and create a sense of urgency and competition.

At the end of three minutes, ask each group to share their reasons for human conflict.

This activity is just a quick way to get participants to think about human conflict and the psychological, political, religious, ideological and economic reason behind it.


### **Jason Silva on 'Abundance'**

This video is inspired by the new book ABUNDANCE, written by X-Prize Founder and Singularity University co-founder, Peter Diamandis and writer Steven Kotler. In it, they explain how exponentially emerging technologies can be leveraged to address humanity's grand challenges... The possibilities are dazzling.




### **Notes for the Facilitator:**

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).




10 min. discussion time | 5 min. display time



**Read resource sheet 9a about memes.**

**Come up with examples of rational and anti-rational memes in the world today that will contribute to or take away from world peace.**



**Activity 1:**  
Memes

**Notes for the Facilitator:**

10 min. discussion time | 5 min. display time

Hand out resource sheet 9a about memes.

Divide the audience into groups of 4-5. Ask them to come up with examples of rational and anti-rational memes in the world today that will contribute to or take away from world peace.



10 min. writing time | 5 min. display time

**In the form of recipe instructions,  
write your thoughts on how to  
create a Peace Meme Collaborative**



Activity 2:  
Recipe

**Notes for the Facilitator:**

10 min. writing time | 5 min. display time

In the form of recipe instructions, participants write their thoughts on how to create a Peace Meme Collaborative



5 min. presentation time per group

**Unscramble the following  
anagrams of memes and  
separate them into rational  
and anti-rational groups.**

1. teorimsrr
2. sinceec
3. lnuagaeg
4. csroehnnspi
5. pstcila sugreyr

**Plenary:**  
Anagrams



### **Notes for the Facilitator:**

Participants unscramble anagrams of memes and separate them into rational and anti-rational groups. (Terrorism, religion, language, censorship, plastic surgery,)

It proves too difficult for the participants, then the facilitator may give away the first letter of the word and/or the last letter.

- Watch Steven Pinker's TED talk on the surprising decline in violence
- Watch Peter Diamandis' TED talk on Abundance



Extension Activities

**Notes for the Facilitator:**

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Read the HUMAN project  
app content on

*How we spend our lives.*



Reading task in  
prep for next  
week

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# O Kabita!



Energiser

## Notes for the Facilitator:

Everyone in turn has to say “O Kabita!” (or another name) in as many different ways as possible, for example with anger, with fear, with laughter, and so on.

Encourage the participants to walk around and say “O Kabita “ to different people in different ways.

- To analyse the importance of creativity and the freedom to create.

- To discuss the meaning of creativity.

### Objectives



#### **Notes for the Facilitator:**

Share the objectives with the audience.



5 min.

**Write your responses to problems 1  
and 2 in the reframing matrices.  
(Resource sheets 10a, 10b)**



**Starter Activity:  
Reframing Matrix**

**Notes for the Facilitator:**

The Reframing Matrix is a lateral thinking strategy by Edward de Bono. The participants need to read the statement in the central grid and write their responses in the four empty frames.

This is a good way to get participants to review their perceptions and misconceptions about what creativity is.

**Jason Silva on 'Radical Openness'**

An anthem on the power of IDEAS. “” Ideas are like organisms, they replicate, they have infectivity and spreading power; they leap from brain to brain and compete for the limited attention of our minds.

YouTube  
Video



**Notes for the Facilitator:**

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).



10 min. prep time | 10 min. presentation time

**Present your ideas on what  
creativity means, either through:  
art, music/song, role, play, poetry,  
rap, essay, or speech.**



**Activity 1:**  
Creativity  
and Multiple  
Intelligences

**Notes for the Facilitator:**

Divide the audience into groups based on ability. They are required to present their ideas on what creativity means, either through: art, music/song, role, play, poetry, rap, essay, or speech.

Encourage participants choose diverse options. It would not be ideal, for instance, if everyone choose essay.





**10 min. prep time**

**The room is now a press conference to announce the idea of a Universal Freedom to Create.**

**We need:**

- A panel of expert speakers who will make a statement.
- A selection of reporters who will question the experts and quiz them for more information.

*Use information from resource sheet 10c*




**Activity 2**  
**Role Play:**  
**Press Conference**

### Notes for the Facilitator:

The classroom transforms into a press conference to announce the idea of a Universal Freedom to Create. The aim of this task is to tease out what this Universal Freedom to Create might mean, and what implications it might have.

Choose

- A panel of expert speakers who will make a statement.
- A selection of reporters who will question the experts and quiz them for more information.

Use information from resource sheet 10c

Encourage participants to get into the mood and take the activity seriously.

### Universal Freedom to Create:

*Imagine who we might become once all of us are free to spend our lives on advancing the ongoing human project. We could transform the very essence of what it means to ascend as a species. Perhaps it will be the wisdom and beauty of our universal creations that would become the measure of our advancement.*



15 min.

**Role play and enact the  
press conference.**

**(The aim is to tease out  
what a Universal Freedom  
to Create means)**

**Plenary:**  
Conference role play



**Notes for the Facilitator:**

Encourage participants to get into the mood and take the activity seriously.

- Watch Ken Robinson's TED talks on *How Schools Kill Creativity*

- Think about this statement: *"We could one day become substrate independent minds that will infuse intelligence into every corner of the universe. We could be landscaping the fabric of space itself."*



Extension  
Activities

#### **Notes for the Facilitator:**

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It is not mandatory for them to do it, but encourage them to give it a shot.

Read the HUMAN project  
app content on *How we  
create knowledge.*



Reading task in  
prep for next  
week

**Notes for the Facilitator:**

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**Notes for the Facilitator:**

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# DODGEBALL



Energiser

## Notes for the Facilitator:

Have a soft ball ready. Divide the audience into two teams. The aim is for each team to throw the soft ball at the legs of the opposing team. If they successfully do so then the person hit is out. The team that loses all its players is the loser.

- To consider the difference between fact and opinion.

- To analyse whether science is the best way to acquire knowledge.

### Objectives



#### **Notes for the Facilitator:**

Share the objectives with the audience.





5 min.

**In groups, discuss the difference  
between fact, opinion, value  
judgement, and revelation.**



**Starter Activity:**  
Fact or Opinion



**Notes for the Facilitator:**

Consider asking participants for examples of each.



5 min.

- “The sun is made of hydrogen and helium.”
- “It is wrong for people to eat meat.”
- “I knew the 9/11 attacks would happen because I had a dream of a plane crashing into a building.”
- “I think the moon is a huge ball of cabbage.”

Starter Activity:  
Fact or Opinion

**Notes for the Facilitator:**

Ask the participants to decide which one of these statements is a fact, opinion, value judgement, or revelation.

**Jason Silva: To understand is to perceive patterns**

To understand is to perceive patterns. Of course what this means is that true comprehension comes when the dots are revealed and you get Steven Johnson's long view when you see the big picture.

YouTube  
Video



**Notes for the Facilitator:**

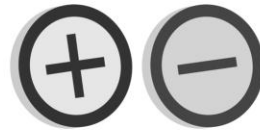
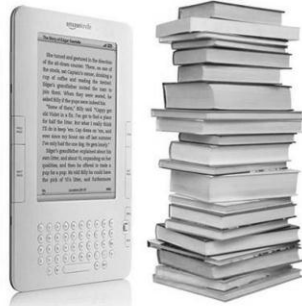
Load the video and play. (Ensure the audio cables are connected and the volume is turned up).



10 min. discussion time | 10 min. sharing time

In triads, fill out the grid in resource sheet 11a for the action below:

**Action: Humans should pursue unlimited knowledge. With time, we should aim to know everything.**



**Activity 1:**  
Plus, minus,  
interesting

### Notes for the Facilitator:

Divide the audience into triads. Hand out resource sheet 11a. Participants fill in the grid for the action below:

*Action: Humans should pursue unlimited knowledge. With time, we should aim to know everything.*

**Plus, minus, interesting:** *In the column underneath "Plus," write down all of the possible positive consequences of taking the action. Underneath "Minus," write down all of the negative effects. In the "Interesting" column, write down all of the "interesting" implications and possible outcomes of taking the action. These may not immediately seem to be good or bad, but could, possibly, lead to new opportunities.*

Participants assign a positive or negative score.

Example: Under *plus*, they may write: knowing everything would mean we'd find a cure for all diseases . +5

Under *minus*, they may write: knowing everything would mean we'd have access to knowledge of how to destroy the planet. – 10

Under interesting, participants may assign a positive or a negative score.



10 min. prep time

**Use the Ladder of Inference resource sheets 11b and 11c**

**Reflect on the following statement:**  
"Science is the best way to acquire knowledge" and fill in the form.



Activity 2  
Ladder of  
Inference

**Notes for the Facilitator:**

Ladder of inference is a useful technique to figure out whether one has leapt to the wrong conclusion. We are inundated with information, fall under peer pressure, and are influenced by social networking. It is not inconceivable that we occasionally are wrong about our beliefs. On the flip side, oftentimes, we may be right about them too.

The Ladder of Inference describes the often preconscious process we take to get from a fact to a decision or action. The thinking stages can be seen as rungs on a ladder:

**Participants follow the above steps based on their already existing belief of whether or not science is the best way to acquire knowledge. Regardless of whether they agree or disagree, ask them to go through the steps of the ladder for them to see how they arrive at their beliefs and actions.**



10 min. prep time

Here's a 5 min TED Ed video that explains the Ladder of Inference:

Example:

**Reality and facts:** A lady's baby happens to get autism after taking an MMR vaccine.

**Selected Reality:** The lady ignores millions of vaccinated babies who are fine.

**Interpreted Reality:** She thinks the autism is caused by the vaccine.

**Assumptions:** She assumes her child would be fine if not for the vaccine

**Conclusions:** She concludes that all MMR vaccines cause autism.

**Beliefs:** She believes that medical science is phony and mainstream medicine is dangerous.

**Actions:** She campaigns against MMR vaccines on talk shows and in the press.



Activity 2  
Ladder of  
Inference

### Notes for the Facilitator:

Ladder of inference is a useful technique to figure out whether one has leapt to the wrong conclusion. We are inundated with information, fall under peer pressure, and are influenced by social networking. It is not inconceivable that we occasionally are wrong about our beliefs. On the flip side, oftentimes, we may be right about them too.

The Ladder of Inference describes the often preconscious process we take to get from a fact to a decision or action. The thinking stages can be seen as rungs on a ladder:

Here's a 5 min TED Ed video that explains the Ladder of Inference:

<http://ed.ted.com/lessons/rethinking-thinking-trevor-maber>



15 min.

**Share your views on the  
conclusions you've  
reached from the ladder of  
inference activity.**




**Plenary:**  
Share your views

**Notes for the Facilitator:**

Participants share their views on how they arrived at their belief and actions about whether science is the best way to acquire knowledge.

Consider all the things you believe to be true.

Reflect on how true you think they are and whether they are **fact, opinion, or revelation.**



Extension Activities

**Notes for the Facilitator:**

The extension activities are for those participants who are keen to engage with the topics covered in the workshop.

It is not mandatory for them to do it, but encourage them to give it a shot.



Read the HUMAN project  
app content on *How we use  
knowledge.*



Reading task in  
prep for next  
week

**Notes for the Facilitator:**

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**Notes for the Facilitator:**

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### Notes for the Facilitator:

The group forms a circle or a line. The facilitator teaches everyone the simple chant “Sagidi sagidi sapopo”. Every time the group chants “Sagidi sagidi sapopo”, the facilitator makes a different action, such as clicking fingers or clapping, to the rhythm of the chant. With each new repetition of the chant, each person copies the actions of the person to their left so that everyone is always one move behind the person to their left.

- To evaluate how we use knowledge.
- To analyse what it means to be human now and in the distant future

### Objectives



#### **Notes for the Facilitator:**

Share the objectives with the audience.



5 min.

"We use knowledge to create new realities." – the  
HUMAN project

"Think of exciting future possibilities and pull the  
present to meet it." - The Imaginary Foundation

Paint a picture in words of how we can use knowledge to  
create new future realities and describe what it would  
look like.



Starter Activity:  
Paint a picture with  
words



### Notes for the Facilitator:

Ask participants to paint a picture in words of how we can use knowledge to create new future realities and describe what it would look like.

This is just a fancy way of asking them to write a descriptive piece about what an exciting future would look like.

100 words should suffice. Remind them of the time. Encourage them to use metaphors, similes, personification, and adjectives.

**Jason Silva:  
Transcension Hypothesis**

The Transcension Hypothesis by John Smart offers an account of what comes after the technological singularity.



**Notes for the Facilitator:**

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).



15 min. discussion time | 10 min. sharing time

**Think about the possibility of uploading the human mind to computers and living for ever.**

- **Blue hat:** How we might overcome death – the process behind it.
- **White Hat:** Just facts about uploading consciousness/the human mind
- **Red Hat:** Feelings about living forever either biologically or digitally
- **Green Hat:** Future possibilities for the human species
- **Yellow Hat:** Benefits of living forever.
- **Black Hat:** Things to be cautious about; potential dangers; play devil's advocate - say what opponents might say about living forever.



### Activity 1: Six Thinking Hats

#### Notes for the Facilitator:

Divide the audience into 6 groups. Assign of the different coloured hats to each group.

#### 1. Introduce Edward de Bono:

Edward de Bono (born 19 May 1933) is a Maltese physician, author, inventor and consultant. He originated the term lateral thinking, wrote the book *Six Thinking Hats* and is a proponent of the deliberate teaching of thinking as a subject in schools.

#### 2. Explain what Lateral Thinking is:

Lateral thinking is solving problems through an indirect and creative approach, using reasoning that is not immediately obvious and involving ideas that may not be obtainable by using only traditional step-by-step logic.

#### 3. Explain that we'll be starting with a lateral thinking exercise called 'Six thinking Hats'.

The term Six Thinking Hats is used to describe the tool for group discussion and individual thinking. "Six Thinking Hats" and the associated idea parallel thinking provide a means for groups to plan thinking processes in a detailed and cohesive way, and in doing so to think together more effectively.





10 min.

**In groups, create a 30-second news bulletin for one of the following statements.**

**(Cheer or hiss in response)**

- Smart, dexterous machines that can perceive, think, learn and move at inhuman speeds without a wink of sleep.
- The first genetically modified and enhanced human being created in a lab.
- 3D printer successfully prints food.



**Plenary:**  
New Bulletin

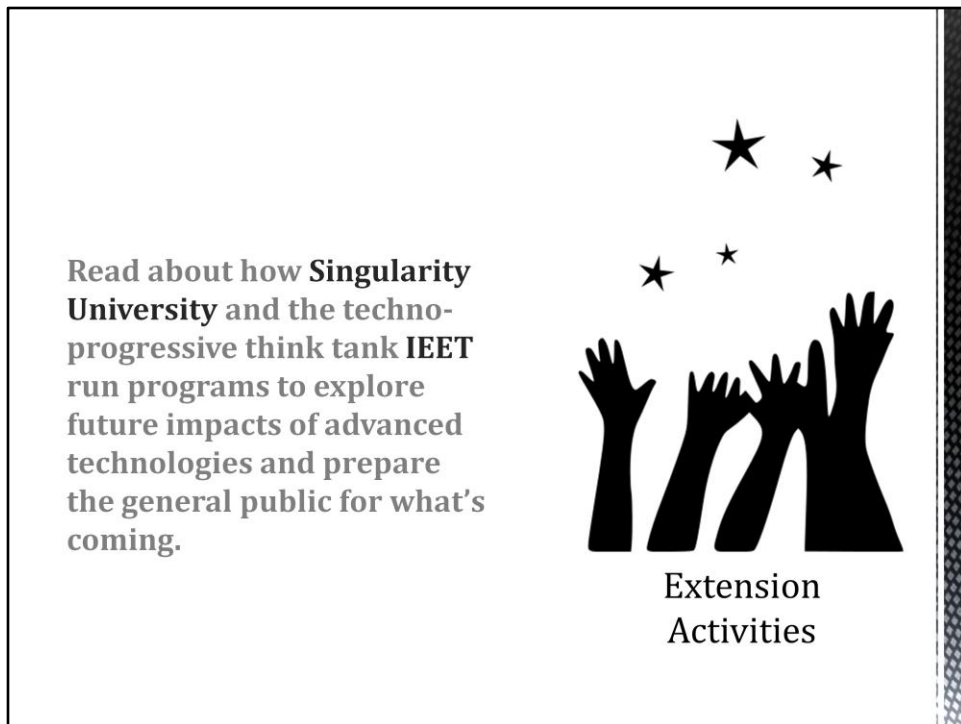
### **Notes for the Facilitator:**

Divide the audience into 3 groups and give each group one of the above news stories.

Each group creates a news bulletin about that news story. The group works on the content together, but then one participant is chosen by the group to be the news reader.

Encourage the news reader to adopt the tone and demeanour of a professional news reader.

At the end of the news bulletin the rest of the students cheer or hiss, depending on their personal response to the story.



**Notes for the Facilitator:**

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Read the HUMAN project  
app content on:

*How we share knowledge.*



Reading task in  
prep for next  
week

**Notes for the Facilitator:**

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**Notes for the Facilitator:**

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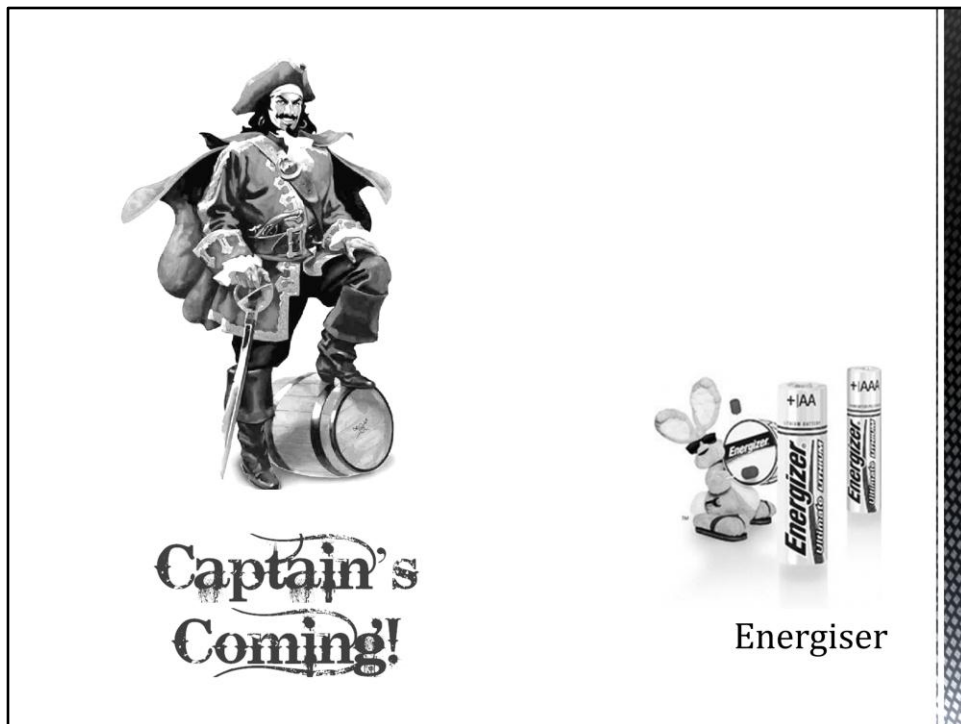


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#### Notes for the Facilitator:

Assign one person to be the "Captain." The role of the Captain is call out the actions and dismiss the players who don't do the actions quick enough or who break from character. Once the captain calls an action, each player has 3-4 seconds to start performing the action. If they don't find a group fast enough or perform the right action, they are out of the game. Here is an explanation of each of the actions...

**Captain's Coming!:** Everyone stands at "attention" (in a salute), and they can't move from this position Captain's Coming!: until the caller says, "At Ease!" If they laugh or break from the attention, they are dismissed.

**To the ship!:** Players run to the right.

**To the shore!:** Players run to the left.

**Man Overboard!:** One person drops to one knee the other stands behind them, puts a hand on their shoulder. Both scan the ocean for the overboard man

**Crows Nest!:** Three players stand backs to each other and lock arms at the elbows to form the crows nest.

**Mess Table!:** Four players squat in a circle like sitting at table and pretend to eat like they haven't eaten in days. Tell them to make really loud eating sounds like "YUM YUM YUM YUM YUM!"

**Walk the Plank!:** Five people stand in a single file row hands on the shoulders of person in front of them

**Mermaid!:** each player individually thrust out right hip, places right hand on that hip, takes left hand and makes a big exaggerated wave and yells out "howdy sailor!" (this one is basically for your own entertainment as it looks hilarious and it gets the participants laughing)

- from *Teampedia.net*

- To examine how we share knowledge.

- To create a library of utopia using the design thinking process

### Objectives



#### **Notes for the Facilitator:**

Share the objectives with the audience.



5 min.

### Starter Activity: Arrange in order

Arrange the words/images in the right order of technological evolution.



#### Notes for the Facilitator:

Participants arrange the words in resource sheet 13a in the right order of technological evolution.

Correct order:

Clay tablets, papyrus, papyri books, block-printed books, moveable type printers, paperbacks, CDs, Kindle (The difference between a CD book read on a monitor and Kindle is that the Kindle is an e-book “printed” on digital ink – it cannot be read in darkness because it is not backlit – which is less stress on the eye than a computer screen).



**Jason Silva:**

**A mind made for mating**

With the advent of culture, we "technologies of rhetoric" to 'capture the attention' of others, except no longer to spread our genes but to spread our MEMES, a new replicator, born from the primordial soup human culture... one that leaps and spreads....

YouTube  
Video



**Notes for the Facilitator:**

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).

## Activity 1: Design Thinking



40 min.

Design a **Library of Utopia** think about the possibility of uploading the human mind to computers and living for ever. Go through the first 4 steps of design thinking:

1. Discovery 2. Interpretation 3. Ideation 4. Experimentation.

Points to consider:

What will go in the library? Who will have control over content? Where will it be stored and in what form? Who can add to it?



### Notes for the Facilitator:

Divide the audience into groups of 5.

In step 1 participants do research on the idea of a Library of Utopia. Encourage them to think about why, what, where, who, how.

In step 2, participants discuss and interpret the findings of their research. They are encouraged to tell stories about what a Library of Utopia might look like and what effect it can have on humans.

In step 3, participants ideate: they actively start brainstorming ideas on how to make this library happen. Encourage participants to write down their thoughts, suggestions, and ideas on as many post-its and stick it on a flip chart. In this phase of brainstorming, there is no right or wrong answer – just a lot of thinking outside the box. So for example, ask them how would they design a library of Utopia with just \$100 or how would they design it if they had superpowers.

In Step 4 , they build a prototype of their Library of Utopia. For want of time, the participants may simply explain using words. At this stage they only share it with others in their own group.



10 min.

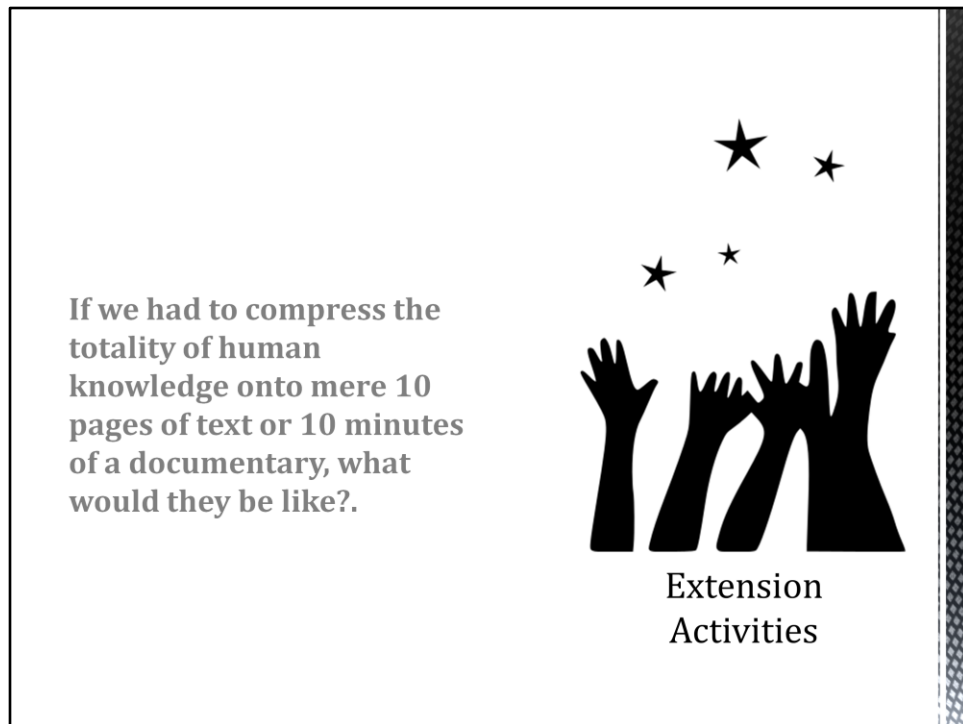
Each group presents the prototype that they've developed in the experimentation phase.



Plenary:  
Prototype

**Notes for the Facilitator:**

Each group presents their prototype (or idea) to the rest of the audience. (2-3 min. max. per group.)



**Notes for the Facilitator:**

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It is not mandatory for them to do it, but encourage them to give it a shot.

Read the HUMAN project  
app content on:

*How we organise.*



Reading task in  
prep for next  
week

**Notes for the Facilitator:**

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**Notes for the Facilitator:**

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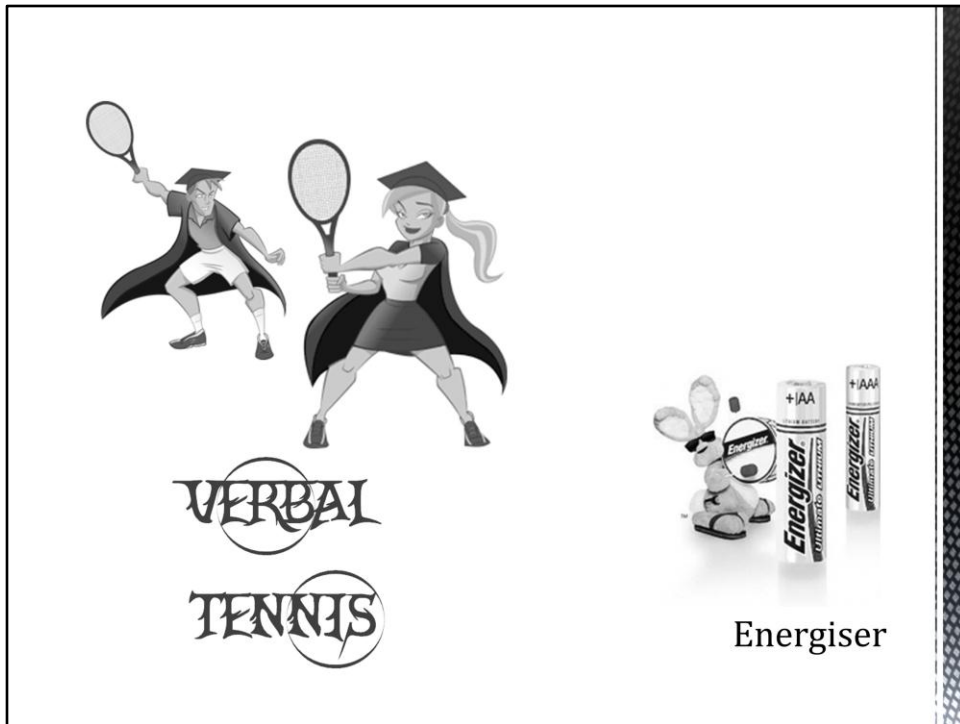


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**Notes for the Facilitator:**

Get participants to pair up.

The focus of the game is on human inventions.

The first person in the pair says the name of an invention, e.g. Television. The second person in the pair volleys back with another invention, e.g. Laptop – this goes on back and forth till one person in the pair either repeats an invention or hesitates for more than 3 seconds.

If the activity gets over too quickly, then the winners of each pair can pair up with other winners and can play a second round of verbal tennis.

The aim of this activity is to refresh participants' memories of all the exciting tools and gadgets humans have created since the dawn of time.



- To discuss how we should organise to reach our goal of sharing, surviving, and ascending as a species.

## Objectives



### Notes for the Facilitator:

Share the objectives with the audience.



15 min.

Social networks + crowd-funding platforms + massive scale collaboration platforms = unprecedented potential to accomplish shared goals.

- **Social Networks**
- **Crowd-funding platforms**
- **Massive-Scale Collaboration**
- **Philanthropic Foundations**

Each group has 15 minutes search online and find as many examples of the category they've been assigned to.



**Starter Activity:**  
**Scavenger Hunt**

### **Notes for the Facilitator:**

Divide the audience into four groups and hand out resource sheets 14a-d

Divide the audience into groups. Assign them to the following groups:


1. Social Networks
2. Crowd-funding platforms
3. Massive-Scale Collaboration
4. Philanthropic Foundations

Each group has 15 minutes search online and find as many examples of the category they've been assigned to.

**Jason Silva:**  
**Radical Openness**



An anthem on the power of  
IDEAS and the free exchange of  
information.

YouTube  
Video




**Notes for the Facilitator:**

Load the video and play. (Ensure the audio cables are connected and the volume is turned up).



20 min.



**Activity 1:**  
Group  
Presentation

Each group presents 3 of the most interesting examples of the category they'd been assigned to.

5 minutes per group.

### Notes for the Facilitator:

Encourage all members of each group to speak.

The aim of this exercise is to illustrate what a wonderfully inventive, innovative, collaborative and creative species we are. We live in a dazzling world, but it's not part of the mainstream narrative. The mainstream media focusses far too heavily on wars, disease, crime, and natural disasters.

We need to be aware of how cooperative we are as a species too – and that we're not just destructive. We're capable of creating wonderful works of beauty.



20 min.

**How can we make the most out of our expanding connections to take on the challenges that affect the trajectory of the on-going human project?**



**Plenary:**  
Group Discussion

#### **Notes for the Facilitator:**

This is an open forum discussion. Anyone can share their views.

Some questions the facilitator may use to elicit responses:

- Now that we have all this collaboration happening, how will it change our lives?
- Is it a good thing that we live in such an inter-connected world?
- What about privacy?
- How does all this massive collaboration make the audience feel?
- Do we need a custodian of the evolving big picture and a community-organizer at a species-wide scale?
- Do we need somebody to own the process of keeping the list of challenges and visions, keeping tabs on our progress and attracting more people to challenges that are understaffed.
- How should we redesign our global institutions to upgrade our ability to deal with global challenges?
- What does all this mean in a school or education setting? How should school change, adapt, and evolve?



**Notes for the Facilitator:**

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It is not mandatory for them to do it, but encourage them to give it a shot.

Read the HUMAN project  
app content on:

*How we expand our  
presence.*



Reading task in  
prep for next  
week

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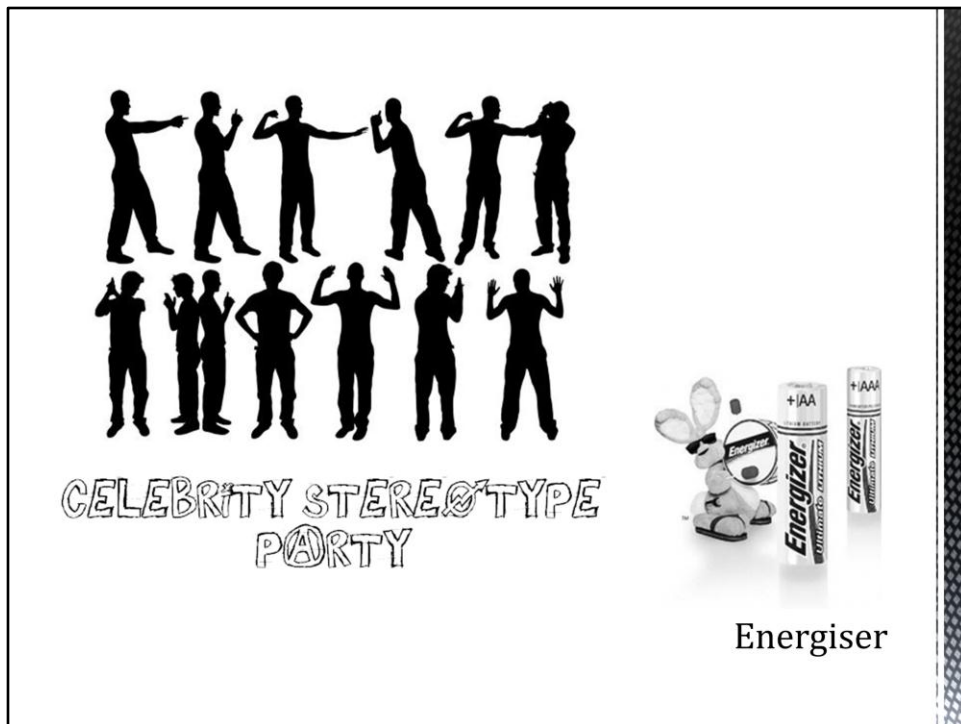


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### Notes for the Facilitator:

#### Set Up

Writing out the names on the tags ahead of time saves time, and also have brief bios of the people to help with the debrief.

#### Directions

From the participants perspective, the object of this activity is for each group member to discover the personality that is written on their own back. The facilitator begins by assigning each group member a "personality" by sticking a nametag with the name of a famous person or character to his or her back. DO NOT show this nametag to the participant! Participants should be able to view the personalities of all other group members, just not their own. The facilitator then instruct the group to mingle, and ask questions of the other "guests at the party."

Individuals can ask yes or no questions about their personalities of others in the group, such as "Am I a woman? Am I a singer? Etc. Instruct participants to ask each member of the group only one question at a time, moving on to another person after each question.

Encourage participants not to offer hints.

- From *Teampedia.net*

- To identify reasons why we should leave our planet.
- To analyse what cosmic culture might look like.
- To create a list of responsibilities for the cosmic citizen.

## Objectives



### Notes for the Facilitator:

Share the objectives with the audience.



5 min.

Search for the reasons why we should leave our planet and tack it on to the whiteboard.



**Starter Activity:**  
Treasure Hunt

### Notes for the Facilitator:

Cut up and hide the reasons from resource sheet 15a under the chairs before the lesson starts. Participants search for the reasons and tack it on to the whiteboard.


**Jason Silva:  
Imagination**

Sartre said, "Because we can imagine, we are Free!"... this video mash up is an exploration of just what that idea means...



**Notes for the Facilitator:**


Load the video and play. (Ensure the audio cables are connected and the volume is turned up).




**Cosmic Culture**

Make a visual representation of what cosmic culture will look like.

You may add post-its, mind-maps, images, phrase etc.



**20 min.**



**Activity 1:**  
Giant Poster

**Notes for the Facilitator:**

(15 min.)

Give out resource sheet 15b

Join several A3 sheets of paper (at least 20) to form one giant sheet of paper. Ask all participants together to make a visual representation of what cosmic culture will look like.

They may add post-its, mind-maps, images, phrase etc.

This may end up being chaotic, but that's ok. The aim is to create a supersized poster – that's packed with information and viewpoints generated by the participants.

**20 min.**

# Cosmic Citizen

## Bill of Rights and Responsibilities



### Activity 2:

#### Bill of Rights and Responsibilities

### Notes for the Facilitator:

(15 min.)

Divide the participants into groups and give each group a copy of the bill of rights and responsibilities to complete (resource sheet 15c).

Participants may focus on the following areas of culture – but they are required to think on a cosmic scale.

Language and dialect

Religion

Technology

Cuisine

Aesthetics - art, music, literature, fashion, and architecture

Values, ideology

Social conventions, including norms, taboos, and etiquette

Gender roles

Recreational activities such as festivals and holidays

Commercial practices

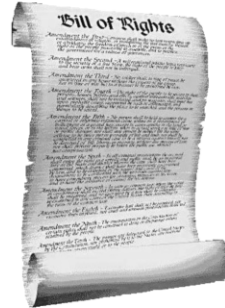
Social structure



20 min.

**Displays your Bill of Rights and Responsibilities.**

**Walk around and read Bills created by other groups.**

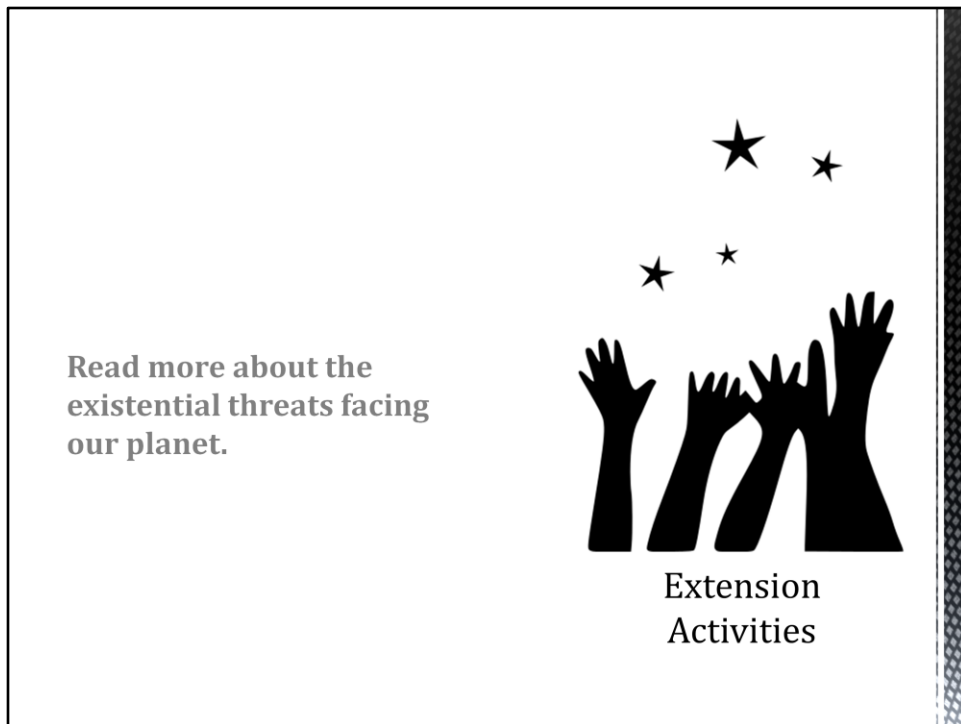


**Plenary:**  
Display

**Notes for the Facilitator:**

Each group displays their Bill of Rights and Responsibilities and other groups walk around and read.





**Notes for the Facilitator:**

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It is not mandatory for them to do it, but encourage them to give it a shot.

Read the HUMAN project  
app content on:

*The Purpose, Agenda, and  
Organisation of the HUMAN  
project.*



Reading task in  
prep for next  
week

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