STEAM Learning

By Petrina Booth and Ian Broadbent, Heads of Primary STEAM

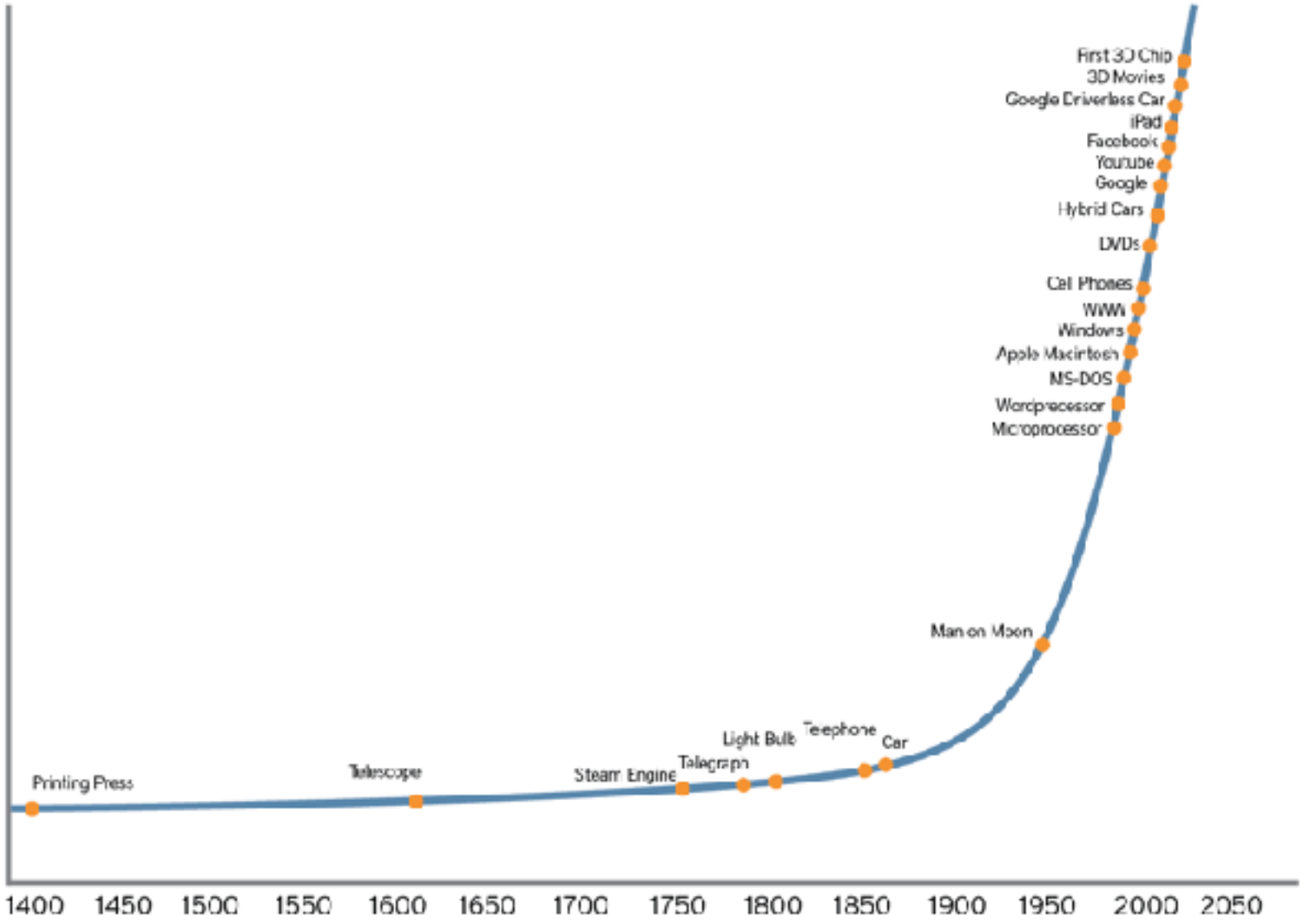
The ‘Why’

Embracing Collaboration, Creativity and Curiosity

We must give our children the skills needed to thrive in the 21st century.

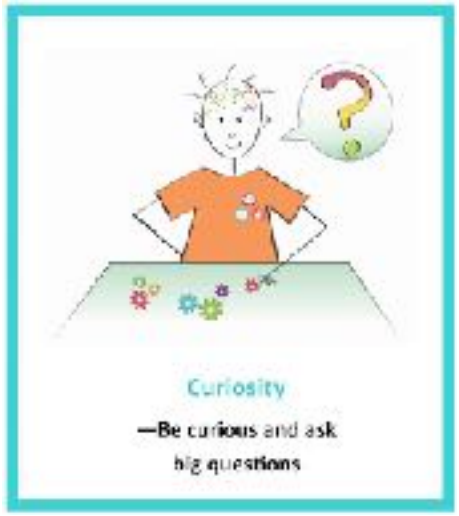
- Transferrable skills
- Flexibility
- Creativity
- Communication
- Experiment rather than wait for instructions
- Collaboration
- Critical thinking

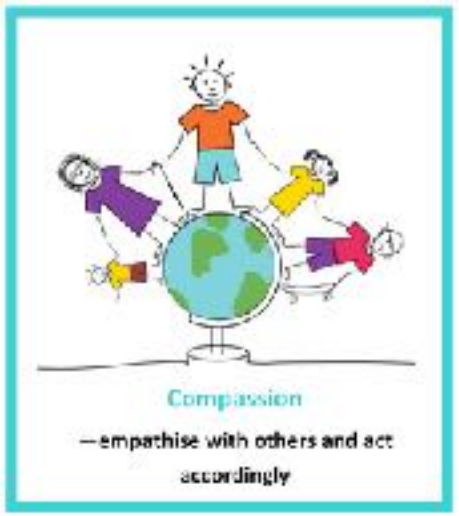
Accelerating Growth in Technology

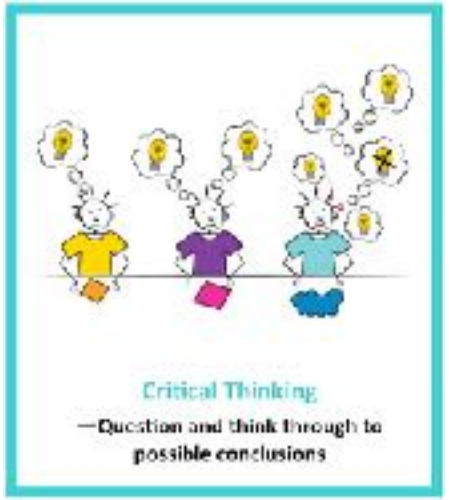


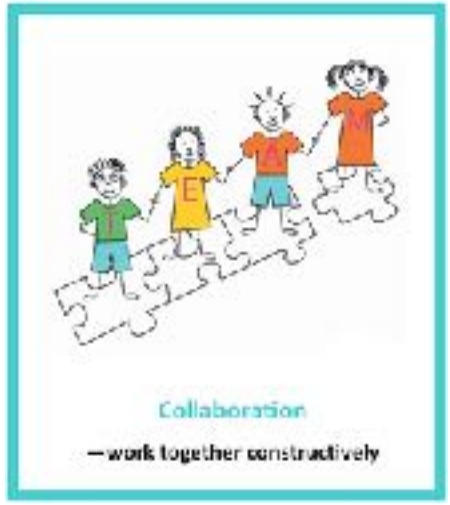
Our Learning Skills

Curiosity
Be curious and ask big questions
Creativity
Generate new ideas and apply them in practice
Critical Thinking
Question and think through to possible conclusions
Collaboration
Work together constructively
Compassion
Empathise with others and act accordingly

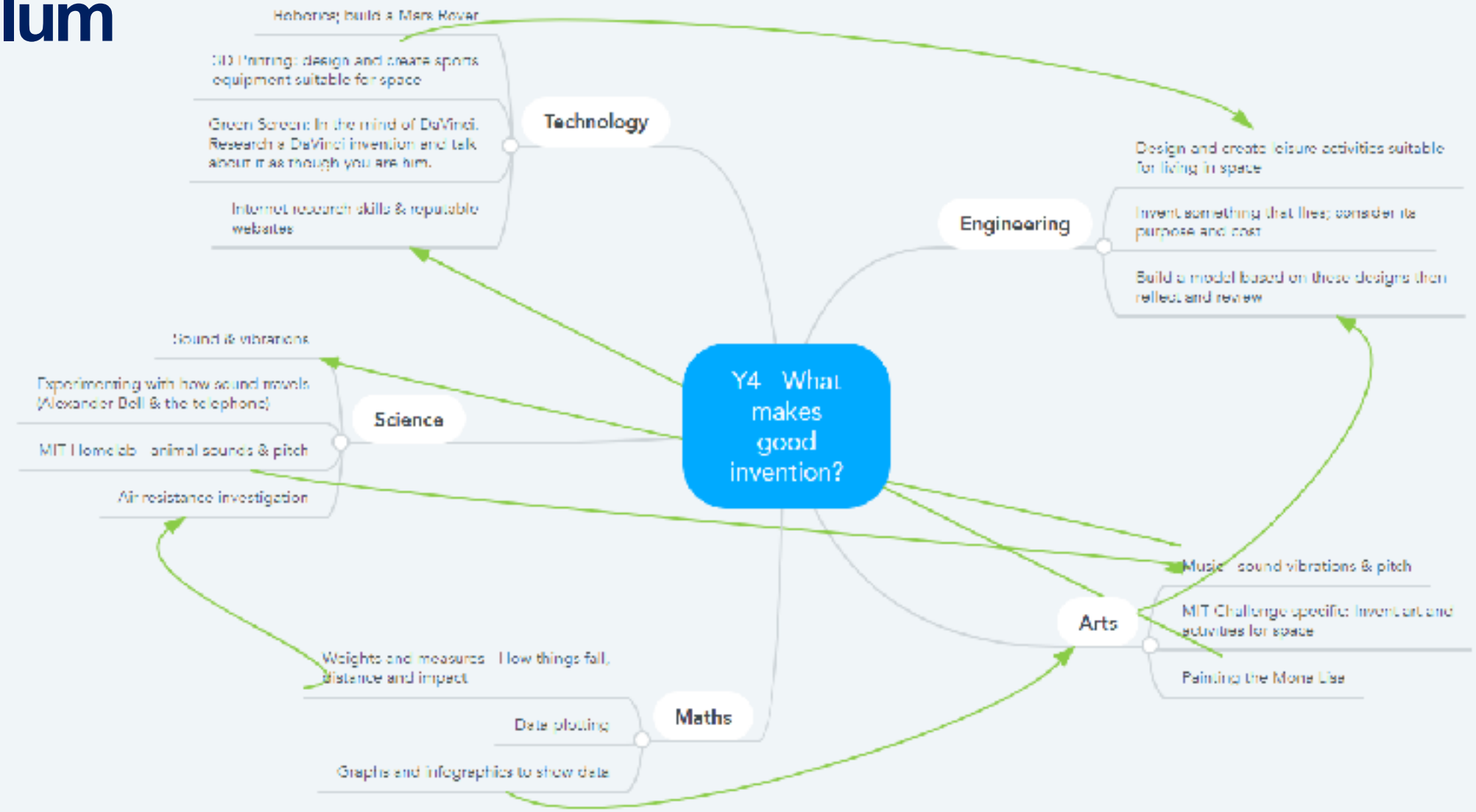








BISS Primary STEAM Curriculum



MIT-NAE Collaboration

Who are MIT?

- Massachusetts Institute of Technology
- The mission of MIT is to advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the 21st century.

How do they impact us?

- MIT challenges
  - Three a year
  - Resources and stimulus provided by a team at MIT

Mission MOXIE - Into the Void - MIT Challenges

Mission Moxie – Dr. Jeff Hoffman

Mission Moxie – Questions answered

Other MIT Challenge Examples

Our Ambitious Strands

- Green Screen Media
- Robotics
- Fabrication

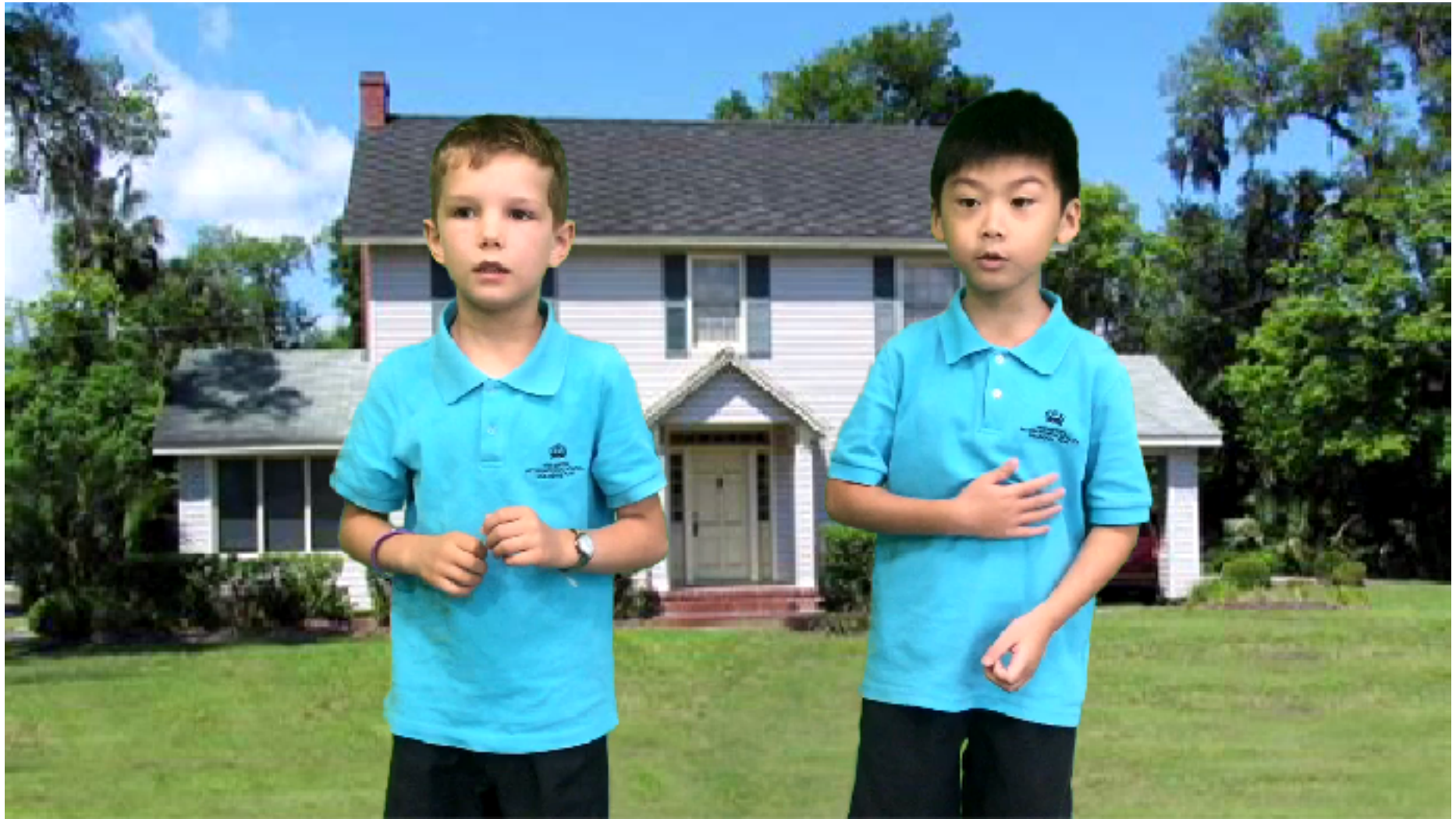
Skills ladders – Green Screen Example

Year group	Skills
EYFS	Teacher led – film using a green screen and the DoInk app
Year 1	+Children use the app using an image background
Year 2	+Trim/cut and edit length of the film; use multiple background images
Year 3	+Adjust the Chroma colour background; edit two videos together & add videos on two layers
Year 4	+Add a third layer; use the masking tool and begin moving beyond DoInk (eg include other apps like stop motion)
Year 5	+Make multilayer edits; combine films to have more than three layers; adjust sounds & add special effects
Year 6	+use filters and edit multiple media through iMovie and other apps

EYFS Teacher led, film using a green screen and the DoInk app

Year 1 +Children use the app using an image background

EYFS +Trim/cut and edit length of the film; use multiple background images



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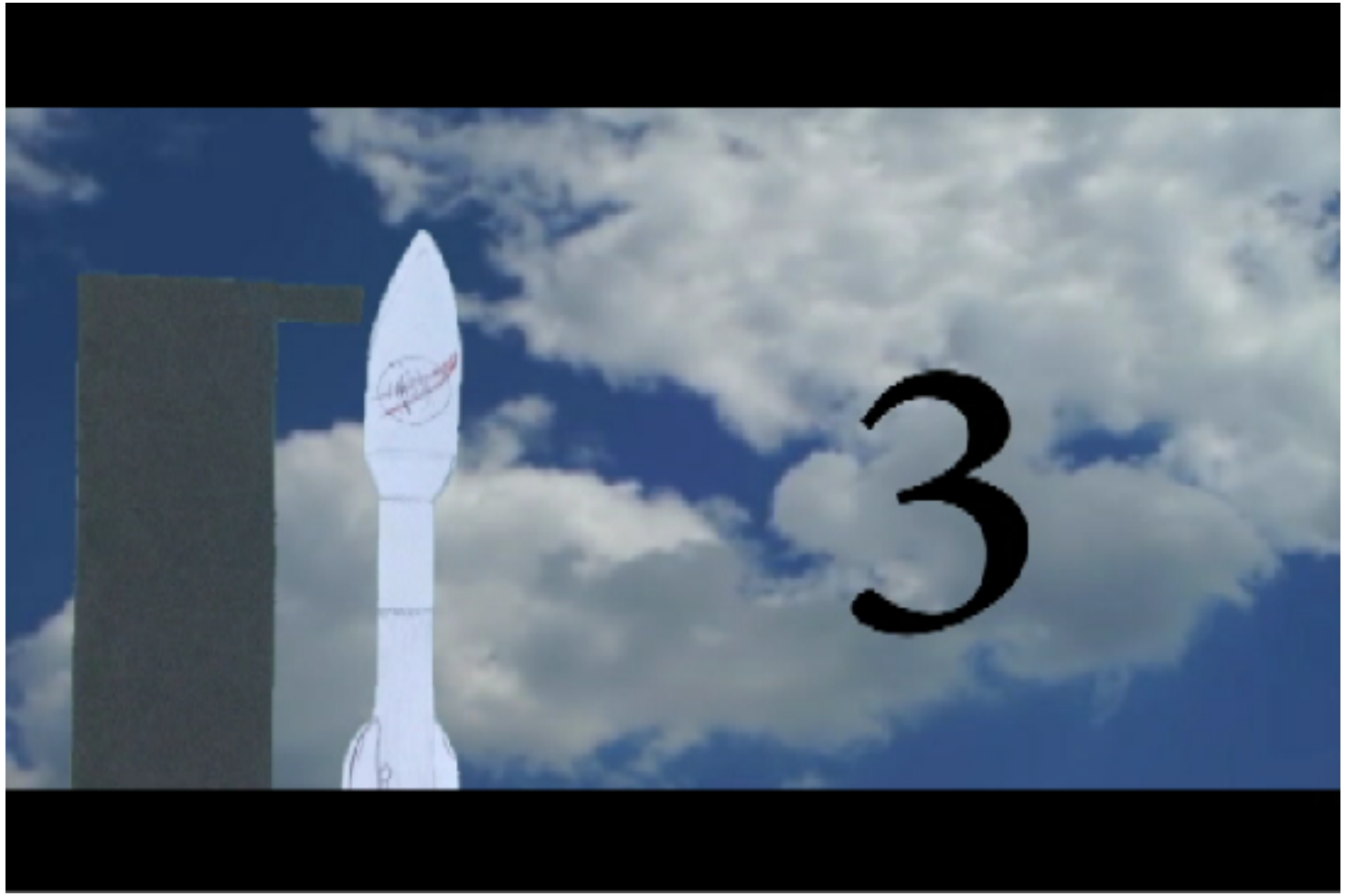

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EYFS +use filters and edit multiple media through iMovie and other apps

Over to you

“Don't ask kids what they want to be when they grow up but what problems do they want to solve. This changes the conversation from who do I want to work for, to what do I need to learn to be able to do that.”

-Jaime Casap

Thanks :)

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