

# Volcano Story

## Learning intention

- To recognise the skills required for the future jobs and to recognise the skills in themselves.
- To gain a better understanding of the skills of adapting and leading.

## Success criteria

- I can discuss the relevance of skills to the wider world and make connections between skills and the world of work.
- I can recognise the skills I have and need for work.
- I can apply my skills to get more information about jobs/careers.

## Activity 1 (Background information)



Great ideas from rubbish

What could plastics be used for?

Toby McCartney – What if plastics made roads

## Activity 1 (discussion)

Engineer Toby McCartney explains how his Scottish start-up MacRebur is persuading councils to use local waste plastic to build roads.

Two English councils have already started building roads this way.

- What do these words mean?
  - Enhanced
  - Inspired
  - Comprise

## Activity 1 (video)



[Can plastic roads help save the planet?](#)

## Activity 1 (video questions)

1. How many kilometres of roads are there in the world?
2. What do we usually make roads out of?
3. What job does Toby McCartney do?
4. What 2 problems does he want to solve?
5. What do they mix into their asphalt mix to make stronger roads.
6. Who inspired him?
7. What did she say lived in the ocean?
8. What did he see in India?
9. What is the waste plastic made into?

## Activity 1 (video answers)

- 1. How many kilometres of roads are there in the world?**  
A: 40 million kilometres
- 2. What do we usually made roads out of?**  
A: Oil
- 3. What job does Toby McCartney do?**  
A: He is an engineer
- 4. What 2 problems does he want to solve?**  
A: Poor quality of roads and waste plastic epidemic.
- 5. What do they mix into their asphalt mix to make stronger roads.**  
A: Waste plastic
- 6. Who inspired him?**  
A: His daughter
- 7. What did she say lived in the ocean?**  
A: Plastics
- 8. What did he see in India?**  
A: Locals poured plastic into potholes and set in on fire – this fixed the potholes
- 9. What is the waste plastic made into?**  
A: Pellets

Volcano


# Activity 2

Think of what jobs you might need to build a road and write them down.

Make up your own jobs cards for the jobs you identify.

### Engineer

Engineers research, design and build everything we use - from bridges and buildings to cars and computers. Specialist areas include civil, mechanical, electrical and aerospace engineering. Excellent maths and science knowledge and problem solving skills are required.



Study/Training:	4 Years
Physical Effort:	50
Brain Power:	85
Social Good:	70
Average Salary:	£40,000
Robot Risk:	0

Fun Fact: The world's tallest building, the Burj Khalifa in Dubai, measures 828 metres in height!

### Chef

A Chef prepares food using a variety of cooking techniques. They also plan menus, deal with suppliers, manage budgets and organise staff in a restaurant, pub, cafe or hotel. Excellent leadership and multi-tasking skills are needed.



Study/Training:	1 Year
Physical Effort:	65
Brain Power:	54
Social Good:	46
Average Salary:	£21,000
Robot Risk:	2

Fun Fact: The largest pizza ever made weighed over 12 tonnes and measured 37.4m in diameter!

### Fire Officer

Fire Officers tackle emergency situations including fighting fires and dealing with car crashes. They also educate the public about fire safety. The working conditions are often dangerous. Excellent team working and problem solving skills are required.



Study/Training:	1 Year
Physical Effort:	90
Brain Power:	45
Social Good:	86
Average Salary:	£31,000
Robot Risk:	3

Fun Fact: The smoke from a house fire is so thick that a house would be completely dark in 4 minutes, even with all the lights on!

### Pilot

Pilots fly aircraft carrying cargo or passengers either within one country or around the world. They check engines, instruments and fuel and monitor in-flight data. Pilots need a pilot's license and an ability to follow instructions and remain calm under pressure.

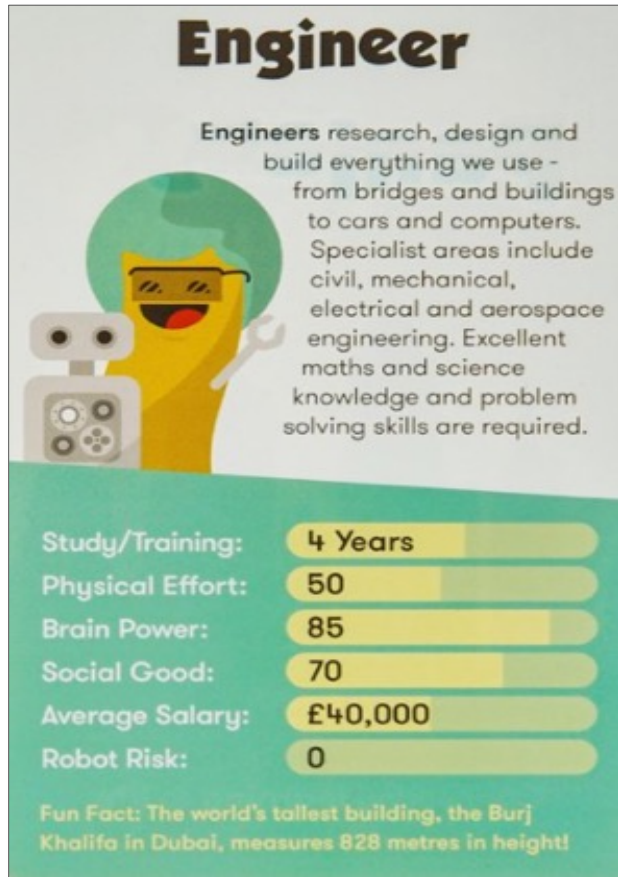


Study/Training:	5 Years
Physical Effort:	35
Brain Power:	75
Social Good:	49
Average Salary:	£85,000
Robot Risk:	6

Fun Fact: The Lockheed SR-71 Blackbird holds the air speed record with a speed of 2,193 mph (3,530 km/h)



## Volcano



Each of the cards should have the following information

- Job description
- Study/training (years)
- Physical effort (1 to 100)
- Brain power (1 to 100)
- Skills required (top two skills)
- Robot risk (1 to 100)
- Relevant school subjects (identify two)

## Activity 3 (group work)

### Using the skill of leading

- How would you organise a team to make a village from plastic waste?
- What jobs would you give your team?
- How would you inspire them to keep working well?

## Activity 4 (group work)

### Using the skill of adapting

- If you were in charge of designing a village and you could not get the material that you needed - what would you do?
- If you designed a village and you realised it was not going to be strong enough to survive a hurricane, what would you do?
- If you were in charge of building a village - what would you do if the sea levels were rising?

## Next Steps



Go to [myworldofwork.co.uk/ican](https://myworldofwork.co.uk/ican) and use Skills Story - Volcano Story and then you can update the Skills section in your Profile to record the skills you have used taking part in this activity