

Tech for Fun (Low Tech)

To understand how technology is used for fun and broaden my knowledge of careers available in this field.



RESOURCES NEEDED

- Printouts of homework sheets
- Crayons/Felt tips
- Large paper for group notes and designs

SUGGESTED TIME FOR LESSON

- 2 Hours

SUGGESTED VENUE

- Computer Suite/Classroom with laptops

PREPARATION NEEDED

- Collect the resources needed for the group design and gaming notes

NATIONAL CURRICULUM LINKS

Computing - Pupils are responsible, competent, confident and creative users of information and communication technology

Design and technology - Investigate new and emerging technologies

1

STEAM skills in everyday life (20 min)

Discuss – What do you think STEAM means? (Science Technology Engineering Arts Maths) Do you consider yourself good at STEAM?

Ask the students to work independently or in small groups to complete the Science Museum's Total Darkness game (you could encourage a friendly competition for the first person to solve the mystery): <https://totaldarkness.sciencemuseum.org.uk>

Discuss what STEAM skills the students used during the game. What STEAM skills do we use everyday for fun activities? What STEAM skills are your strengths?

2

How is Tech used for Fun? (5 min)

Discuss the examples on the PPT. Can the students think of any other examples?

3

What careers could you aspire to have in Tech for Fun? (5 min)

Discuss the examples on the PPT and the related starting salaries (if you think this is appropriate and the children show an interest in the salaries).

Do any of these careers appeal to the students and why?

4

Watch the role model video (5min)

After watching, discuss the role model's career path: What led them into a technology career?

What do they enjoy about their career?

5

AR and VR (5 min)

Discuss – do the students know what AR (Augmented Reality) and VR (Virtual Reality) mean and the difference between them?

Watch the following video and as a class, create a written definition for AR and VR: <https://www.youtube.com/watch?v=vz0UUVd12ps>

6

The evolution of computers and gaming (10 min)

Watch the following clip of the evolution of video games/computers: <https://www.youtube.com/watch?v=33-ujUwMN8>

Discuss how computers have evolved in the past 50+ years. What are your computers at home like? What do you use them for?

As a class make a list of the student's favourite video games. Ask them to work in groups to make a list of the top 10 things which make video games addictive/fun to play. Discuss their ideas and ask: Would any of you like to be Game Designers in the future?

7

The future of gaming (10 min)

<https://www.youtube.com/watch?v=wFTmQ27S7OQ>
Play from 1:02:52 – 1:05:30

Discuss the future possibilities of using multiplayer AR and VR for gaming. What would the students like to see in the future of gaming? Imagine endless possibilities – what do you think future game designers will be working on?

8

Create Your Own Video Game Character (25 min)

Students to work in small groups to design their own computer game character following a given design criteria. Please use the provided criteria or use your own to suit your current curriculum topic and skills. For example, if you are studying a historical time period the character could be from this period or the character could be based in a certain environment i.e. the rainforest.

Example Criteria:

- Cannot be a copy of an existing character
- Must be able to survive in space and on Earth
- Must have a power which allows it to save/protect others
- Must have a special 'techy' tool they use all the time
- Must be suitable for children from 6 years and above (not scary)

9

Character Presentation (10 min)

Give the children time to present the characters to the rest of the class/another group and talk through how their character meets each criteria.

Explain to the class that this is how computer game designers work. They are given criteria and design characters to fit the criteria.

10

Theme Park Designer (10min)

Watch the following clip and use the information below the clip to discuss Mike's career as a Theme Park designer: <https://www.firstcareers.co.uk/careers/what-does-a-theme-park-designer-do/>

What does his job involve? Would any of the students like this career?

11

Tech office (5 min)

Look at pictures of fun and inspirational tech office spaces around the world i.e. Google/Apple headquarters.

Discuss what it might be like to work there.

12

Class discussion (5 min)

Can you see yourself working in any tech for fun careers? Did anything particularly interest you today?

13

Homework and further learning opportunities (5 min)

Find a current advertised job in tech that you would like to apply for and create an overview of the job:

- What roles and responsibilities does the job include?
- What qualifications would you need?
- Which GCSEs would you need to take?

Make notes to share with your group next lesson.