



Game Design

Lesson plan

Aim

Learn about software development while making your own game using the MakeCode Arcade. Create sprites, code and music to bring your game to life and learn more about digital careers.

Mapping

CES 'I Can' Statements	CMS Themes
<ul style="list-style-type: none"> ★ I can discuss the relevance of skills to the wider world and make connections between skills and the world of work ★ I can demonstrate and apply the skills I have learnt across the curriculum in relation to the world of work 	<ul style="list-style-type: none"> ★ Horizons

Learning Outcomes

Young people will:

- ★ Find out how to develop software
- ★ Learn how a computer works and how the different components work together
- ★ Create your own character and environment art
- ★ Write code to get your game up and running
- ★ Share your game with your classmates

Activity on next page...



Instructions

Before you start

You will need access to a laptop or tablet and access to this website to complete the activity:

- ★ Access to the [Game Design Video Guide](#) (1)
- ★ Access to the [Makecode](#) (2) website

Follow-up

The activity looks at roles in web development, the creative industries and an introduction to the creative aspects of programming.

[Software Developer](#) (3), [Games Developer](#) (4), [Games Designer](#) (5),
[Software Engineer](#) (6), [Graphic Designer](#) (7), [Systems Analyst](#) (8) , [App Developer](#)
(9)

They can find out about related apprenticeships on [Apprenticeships.scot](#) (10)

Foundation Apprenticeships – [Software Development](#) (11), [Creative and Digital Media](#) (12),
[Hardware and Systems Support](#) (13)

Modern Apprenticeships – [Engineering](#) (14), [IT and Telecommunications](#) (15)

Graduate Apprenticeships – [IT: Software Development](#) (16),
[Engineering: Design and Manufacture](#) (17), [Data Science](#) (18)

Website references

1. Game Design activity guide video <https://bit.ly/3fpASOm>
2. Make Code <https://arcade.makecode.com/>
3. Software Developer <https://bit.ly/3dv3Aww>
4. Games Developer <https://bit.ly/3eJBmyt>
5. Games Designer <https://bit.ly/3cvxSxP>
6. Software Engineer <https://bit.ly/2U1pHmP>
7. Graphic Designer <https://bit.ly/2XRU8g9>
8. Systems Analyst <https://bit.ly/3009Rwl>
9. App Developer <https://bit.ly/2XoJC0Q>
10. Apprenticeships.scot <https://bit.ly/2zVDdRR>
11. Software Development Foundation Apprenticeship <https://bit.ly/2zSuTSU>
12. Creative and Digital Media Foundation Apprenticeship <https://bit.ly/36VI7L2>
13. Hardware and system support Foundation Apprenticeship <https://bit.ly/3gKddcR>
14. Engineering Modern Apprenticeship <https://bit.ly/2AxFenv>
15. IT and Telecommunications Modern Apprenticeship <https://bit.ly/36U4Oim>
16. IT: Software Development Graduate Apprenticeship <https://bit.ly/2U41uMr>
17. Engineering and Manufacture Graduate Apprenticeship <https://bit.ly/2MmpAxN>
18. Data Science Graduate Apprenticeship <https://bit.ly/2BoBZit>