

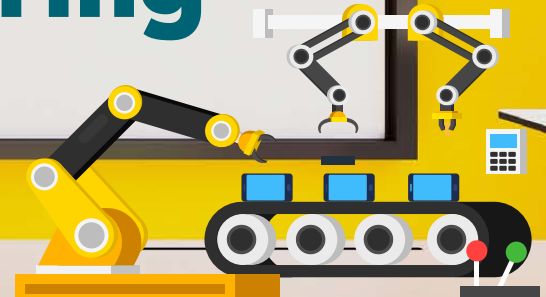
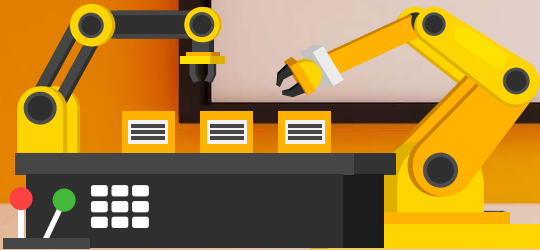


My  
World of  
Work  
*LIVE!*



# Rover Builder

## Advanced Manufacturing



# Classroom Clash: Rover Builder

## Introduction

Welcome to Classroom Clash! This suite of nine games has been designed to inspire pupils to think about possible future careers.

Each game is linked to an industry important to Scotland's economic growth and where there are lots of opportunities for interesting and successful careers. By playing Classroom Clash, your pupils will be introduced to meta-skills and will start to recognise how these skills can be used in lots of different jobs.

Industries explored within Classroom Clash include:

- **Early Learning and Childcare**
- **Health and Social Care**
- **Construction**
- **Digital Technology**
- **Finance**
- **Manufacturing**
- **Life and Chemical Sciences**



# Classroom Clash: Rover Builder

## Learning objectives

Using the Rover Builder game and [My World of Work](#), you will explore manufacturing careers and discover what skills are required to work in these important job roles, especially within the related space sector. You will learn what a space rover is, where they are used and why they are important.

**In this Rover Builder game, you are tasked with producing a working space rover by attaching the correct components at a precise time as it moves along a production line.**



## Success in this lesson will look like:

- I can identify the different meta-skills needed to work within the manufacturing industry
- I can give examples of careers within the manufacturing industry
- I understand what a space rover is and why it is used
- I understand what manufacturing career opportunities there are in Scotland

# Classroom Clash: Rover Builder

## Curriculum links

**Technologies:** TCH 2-05a

**Literacy:** LIT 2-04a; LIT 2-07a; LIT 3-07a

## Meta-skills



**Self-management:** [Focusing](#), [Adapting](#)

**Social Intelligence:** [Leading](#)

**Innovation:** [Sense making](#); [Critical thinking](#)

## How did your school do?

- Once the game is finished, input your score to the leaderboard
- Check how well your school has scored compared to others across the nation
- Play again and try to beat your high score!

 **Well done!**   
Your final score is  
**8000**

Enter your details to submit your score to the leaderboard

Please note by entering your details, your information will display on the leaderboard and be visible to everyone who selects your school. If you do not want your name displayed, please choose an alias to use instead.

[Privacy notice](#)

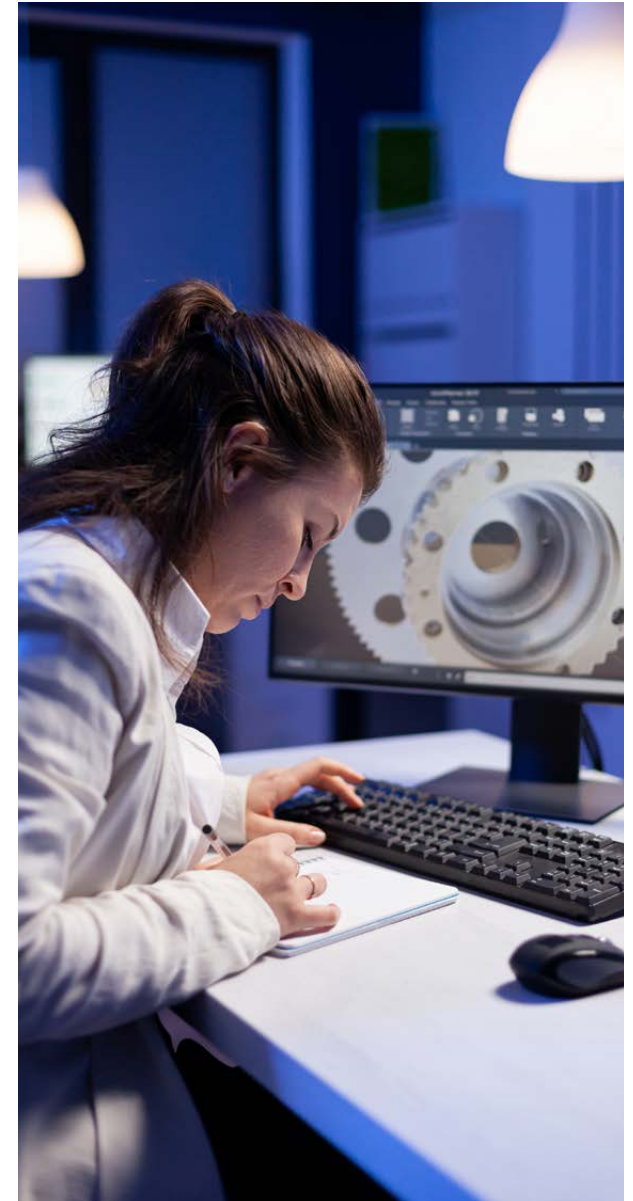
# Classroom Clash: Rover Builder

## Follow on learning – 10 min activity

- Using the **Explore careers** profiles on **My World of Work**, find three careers that you think would be most useful in the space manufacturing industry
- What other manufacturing careers are available? How many different industries can you find that use manufacturing?
- From the careers you found on **My World of Work**, list some of the skills you need to work in the manufacturing industry
- What subjects do you think would be most useful for working in the space manufacturing industry?

## Additional classroom activities

- **Mars Rover research:** research how many Mars Rovers there are and what are the differences between them? **Mars Rover Perseverance landing**
- **Design your own space rover:** either working in groups or individually, challenge pupils to design their own space rover. How will it be transported and land safely on the planet? What mission is it to carry out and how will it achieve this? What facilities/functions will it need?
- **Production line challenge:** split the class into groups and ask them to set up a production line to complete a task, e.g wrapping a box, packing a bag with kit pieces. Ask the groups to arrange themselves in the most efficient order to complete the tasks within a set time and see who can complete the most



# Classroom Clash: Rover Builder

## Related careers

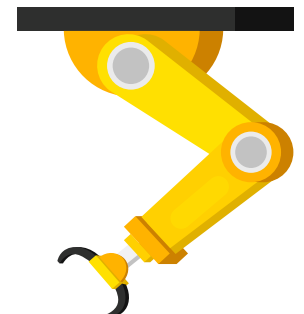
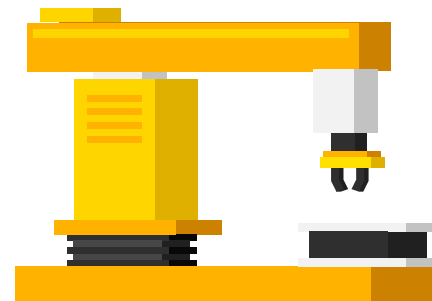
- Aerospace engineer
- Satellite systems technician
- Manufacturing systems engineer
- Manufacturing operator
- Production manager (manufacturing)
- Quality manager
- Quality control technician
- CAD technician
- Electronics engineer
- Welder
- Mechanical engineer

## Useful manufacturing links

- National Manufacturing Institute Scotland
- Manufacturing in Scotland – Make Works
- Scottish Manufacturing – Electric Scotland
- Space Scotland




## Sectoral Skills Assessments

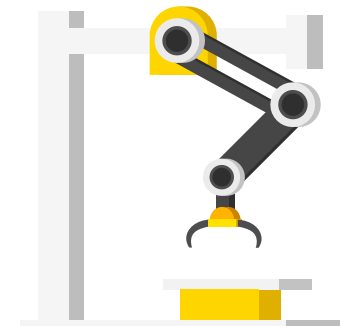
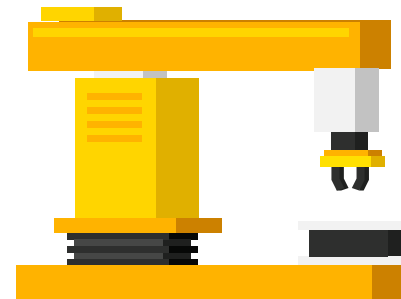
- Engineering
- Construction



# Find your route...

## When it comes to your career, there are so many possibilities

- Use [My World of Work](#) to find out about different options
- Research different colleges or universities for any courses that interest you:
  - [Colleges in Scotland – list of members](#)
  - [Universities Scotland – list of members](#)
- Look at [Apprenticeships.scot](#) to learn about the pathways that are available. You can start an apprenticeship whilst still at school and you work towards gaining a qualification while on the job. There are 3 options available:
  - **Foundation Apprenticeship** 
  - **Modern Apprenticeship** 
  - **Graduate Apprenticeship** 



# Next Steps

## Interested in learning more about this sector?

- Make an appointment to speak to your school careers adviser
- Check out the related [Engineering and manufacturing](#) industry pages on [My World of Work](#)
- Do some research on related careers by checking out the Explore careers pages on [My World of Work](#)
- Listen to industry experts explain their roles within the sector by watching the [Virtual Meet the Expert](#) videos
- Find out about routes into work and careers by checking out [Apprenticeships.scot](#)

