

# **Robot Rescue**

## Students that participate in 'Robot Rescue' will understand links between robots and the real world.

After diving into the world of coding, AI, sequences and senses, learners apply their transferable skills to complete a team challenge.

Set in Japan, learners work together to programme a robot and save the survivor of an 'earthquake', aiming to navigate around debris, barriers, and ramps in their way and return to safety as quickly and efficiently as possible. Throughout the session, learners will apply mathematical and geographical skills to help them succeed in their challenge.

By the end of the session, learners will understand the key concepts of robots, be able to write advanced code, and identify various coding patterns. By taking part in the challenges learners will also develop the key transferable skills required for a successful career in STEM.

Ideal for keystage 3 and 4 but can also be delivered successfully to keystage 5 (year 7-13)

#### Gatsby benchmarks:

- Linking curriculum learning to careers (4)
- The workshop supports your learner's development of their essential skills and raising aspirations.

#### **Curriculum Links:**

- Geography Developing knowledge about geographical risks and earthquake impact.
- **Maths** Use the fundamentals of mathematics to solve a variety of problems, including angles and measurements.
- **English** Following instructions, speaking, listening, sharing ideas and presenting.
- Computing Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- **PSHE** Develop skills for future success.

#### Logistics and planning:

- The session is designed for around 30 learners and requires a hall space.
- The activities can range from 1 2 hours.
- We ask that a teacher is always present throughout the activities, to support learner engagement and manage behaviour.

#### For further learning this activity goes well with:

- Tower Tournament
- <u>Code Breaking</u>

### <u>Computational Thinking</u>

#### Why Choose Learn by Design?

We have been delivering workshops into schools since 1995 and have a team of Education Communicators with a range of scientific and educational backgrounds.

We can involve ambassadors into the day if requested.

Watch the video below to see the spheros: https://youtu.be/umiOaRe2t7l





Approx. **30** learners



1-2 hours