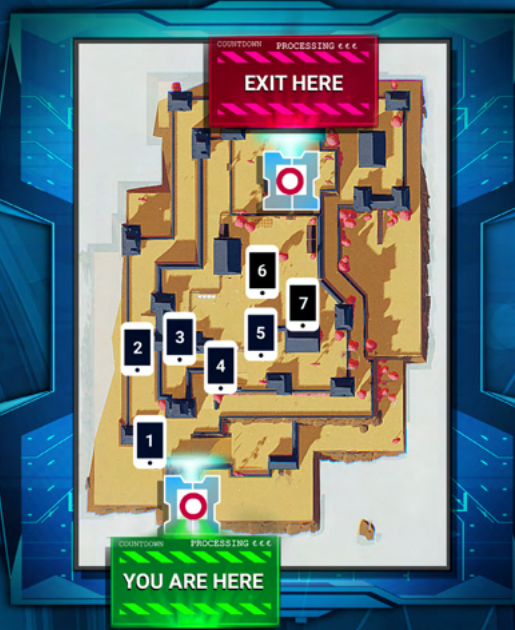


CHALLENGE 5

Your challenge is to work your way through the Castle in the Clouds. Find the phones. Complete your mission log and report back to Soportar.



CONTINUE

LEARNING OVERVIEW

CORE FOCUS

- **Teacher facilitates** the pupils' learning.
- **Creative problem solving** is a key attribute of 'New Value Creators' and also, for success in life. This lesson positions problem solving as a creative process. Problem solving is initially explored in the broad sense of problem solving and then is linked to creating customer value i.e. solving problems or doing jobs for people. As part of creative problem solving pupils can use the ideation techniques introduced in lesson 2.
- **Pupils practice giving and receiving feedback**, which supports a feedback culture; ensures each pupil is a motivated perpetual learner, and; assists each child to reach higher levels of achievement.



PURPOSE

- **Develop 21st Century Skills Toolkit:** This lesson introduces key concepts for creative problem solving. The difference between problem solving and creative problem solving is explained. The creative element requires innovation. A change in perception is required for innovation. Teamwork is essential to generate different perceptions. Pupils use the learning from lesson 2, active listening; lesson 3, recognising when we are anxious and the T-CUP techniques; lesson 4, teamwork to support creative problem solving.
- **Practice Peer Education Process:** A new Peer Educator Team practice teamwork; oracy and presentation skills; social skills and leadership by presenting the lesson to their peers.

SUSTAINABLE DEVELOPMENT GOAL ALIGNMENT



LESSON 5 - CREATIVE PROBLEM SOLVERS

The learning from this lesson is supported by learning from Hugh Cooney. Hugh is the inventor of BleeperBike, an app to rent a bike. BleeperBike is linked to the UN Sustainable Development Goal 11 'Sustainable Cities and Communities'.

CURRICULUM LINKS

SPHE Strand: Myself and the Wider World

Strand Unit: Developing Citizenship

Strand Subunit: Environmental Care

Appreciate the environment and develop a sense of individual and community responsibility for caring for the environment and being custodians of the Earth for future generations.

Geography Strand: Environmental Awareness and Care

Strand unit: Caring for the Environment

Come to appreciate individual, community and national responsibility for environmental care, explore the concept of custodianship and its implications, become familiar with the concept of sustainable development, appreciate the need to protect environments for present and future inhabitants.



KEYWORDS USED

Creative problem solving, customer value, innovation, problem solving, radiant light, solar panel, thinking outside the box

METHODOLOGIES

Ideating, creative thinking, communicating, teamwork, critical thinking, discussing, analysing, observing, giving and receiving feedback, recording.

INTENDED LEARNING OUTCOMES

By the end of the lesson, pupils will be able to:

- **Explain** the benefits of creative problem solving for Venture Owners, success in life and in school.
- **Describe** the meaning of creative problem solving.
- **Explain** the difference between problem solving and creative problem solving.
- **Understand** what actions are required for creative problem solving.

LESSON 5 - CREATIVE PROBLEM SOLVERS

- **Apply** creative problem solving to ideate a solution for an affordable energy project.
- **Give or receive feedback**, based on success criteria:
 - Everybody in the peer educator team should take part.
 - Peer educators should try to speak clearly.
 - Peer educators should try to sound enthusiastic.
 - Peer educators should try to stimulate discussion amongst the rest of the class and encourage each group to feedback their thoughts / comments.

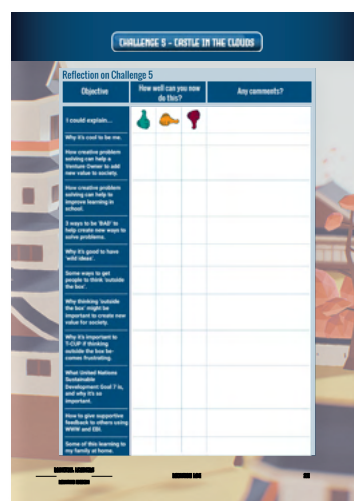
DIFFERENTIATING THE LEARNING

It is not possible to provide detailed advice on how teaching should be adapted to meet the learning needs of all pupils. Teachers will know best the needs of their pupils to enable them to access this learning. The lesson plans do, however, include guidance and ideas for how some activities can be differentiated for pupils who may require additional support or challenge to further develop their thinking.

ASSESSMENT OF LEARNING

Rather than dictate to schools how to assess pupils' learning and progress, a range of different approaches are provided, from which schools can select. The outcomes of the experiential learning that Magical Leaders provides should also be seen by teachers in the way that pupils conduct themselves, respond and contribute to feedback, manage their relationships and in their attitudes to learning.

Reference Appendix Page 75



FACE TO FACE AND REMOTE LEARNING



If pupils are not able to come into school, teachers can facilitate Magical Leaders virtually. It would be great to think that young people could be empowered to become peer educators and facilitate the sessions online themselves. Zeeko suggests that it is probably better that the teacher adapts some of the content and facilitates the sessions via Zoom, MS Teams, Google Meet or whatever online platform you and your pupils are used to using. Some activities will have to be adapted and if teachers want to discuss how this can happen, one of our team would be delighted to support you with this.

TEACHER LESSON OVERVIEW



This is the fourth lesson which is planned to be facilitated by a team of Peer Educators, (although it can be facilitated by the Teacher). Pupils focus on **creative problem solving**, which requires a change in perception. A tennis ball or football is required for this lesson. The list below summarises the content that the Presenters will facilitate for this lesson:

PHONE 1 - Introduction - 5 Minutes

- The lesson starts with an introduction to the peer educator team.
- Pupils review the Home Activity from lesson 4 and check who has been affirming 'It's cool to be me'.
- The lesson feedback process is outlined.

PHONE 2 - Venture Challenge - 5 Minutes

- The key concept, creative problem solving and the collectable for the lesson are introduced.
- Hugh Cooney from **BlepperBike** introduces himself and presents the "Venture Challenge" for pupils to work through during the lesson. Two questions are asked:
 - Why is creative problem solving important for Venture Owners, success in life and in school?
 - What do you have to do to solve a problem creatively?

PHONE 3 - Creative Problem Solving - 5 Minutes

- Pupils contextualise creative problem solving in the context of customer value; solving problems or doing jobs for customers, and; ideation.

PHONE 4 - Thinking Outside the Box? - 10 Minutes

- Pupils work individually on Classroom Activity 1 to understand the negative impact of our perception on problem solving. Ideation techniques are offered as a solution to this constraint.



LESSON 5 - CREATIVE PROBLEM SOLVERS

PHONE 5 - Fastest Finger - 10 Minutes

- Pupils practice a team based creative problem solving challenge and discuss creative problem solving for venture owners.



PHONE 6 - Solar Energy Ideation - 10 Minutes

- The sun, radiant light and solar energy are discussed.
- Pupils work through Classroom Activity 2 to ideate alternate solutions to creating solar heat for their classroom.
- Suggested Solutions: The graphic below shows some alternate solution ideas to the solar heat panel activity.
 - Paint the bottle black, add water and place in direct sunlight.
 - Cover a window that is in direct sunlight with the black paper or black plastic bags.
 - Paint the box black and place in direct sunlight.

Note: Pupils will evaluate their proposed alternate solutions in the next lesson.



PHONE 7 - Recap, Feedback, Home Activity - 5 Minutes

- Pupils take lessons and find inspiration from the success of Hugh Cooney, who we heard from in the short video at the start of the lesson.
- Pupils recap on the key messages from the lesson.
- The peer educators ask the class for feedback based on the success criteria. Peer educators express gratitude for feedback.
- Pupils give feedback based on 'what went well' and the lesson would be 'even better if'.
- The class previews the Home Activity, which includes talking with their family about different ways to create ideas to solve problems.