

Biological sciences

Project
1

Camouflage in animals

TASK:

Design and create a camouflaged animal in a habitat.

CRITERIA:

- Choose an animal that can camouflage itself.
- Build a 3D habitat to place the animal in.
- Make a 3D model of the animal.
- The animal must blend into the habitat or background, and have the same colours and textures.

MATERIALS:

- playdough/plastic modelling clay
- craft supplies
- cardboard box/ shoebox
- digital video recorder or iPad®



Oobleck speaker

TASK:

Create and produce a music video using dancing oobleck.

CRITERIA:

- Create the oobleck using the ingredients listed
- Decide what colour or mix of colours to use.
- Choose a song to play through the speaker. You may want to experiment to see which song works better with the oobleck.
- Film a music video of the dancing oobleck that is approximately 3 minutes long.

SUGGESTED MATERIALS:

- digital video recorder or iPad®
- speaker or subwoofer
- cling wrap or tray placed on the speaker
- oobleck: 1 cup of water, 2 cups of cornflour, drops of food colouring



Oobleck speaker

- Research the properties of oobleck and decide if it is easy to determine whether it is a liquid or solid.
- Plan and write the method for making the oobleck. Plan which song will be used.
- Collect the materials you will need, including a speaker, cling wrap or tray, oobleck and a digital video recorder.
- Create the dancing oobleck and music video to look like your plan.
- Check that the oobleck and video meet the criteria.
- Play the video to the class. Explain why you chose the song, and whether you think oobleck is a liquid or a solid.



Earth and space sciences

Project 1

Alien planet

TASK:

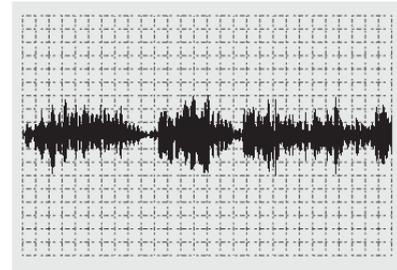
Design and create an alien from one of the planets in the solar system, and create an audio recording of the alien describing its planet.

CRITERIA:

- The alien should not be any larger than 20 cm tall.
- The alien can be made of any materials available in the classroom or brought in from home.
- The alien must come from a planet in the solar system.
- The audio must include facts about the planet's distance to Earth and the sun, how long it takes to orbit the sun and its size.
- The audio must be no longer than three minutes.

SUGGESTED MATERIALS:

- digital audio recorder or iPad®
- plastic modelling clay
- pipe-cleaners
- card
- recycled materials



Alien planet

- Find out about the planets in the solar system. Research facts about one planet in particular and what conditions on the planet are like, including the planet's distance to Earth and the sun, how long it takes to orbit the sun, and its size.
- Plan and draw an alien design, and write a script for the audio recording.
- Collect the materials you will need, including any materials to make the alien and a digital audio recorder.
- Create the alien and record the audio.
- Check that the alien and audio meet the criteria.
- Display the alien to the class and share the audio recording. Explain how the alien was made and what materials were used.



Physical sciences

Project 1

Secret quiz

TASK:

Design and create a series of quiz question cards that are only revealed by placing a glass of water in front of the card.

CRITERIA:

- The quiz questions must relate to light and its ability to be absorbed, reflected or refracted.
- 10 question cards must be written. The answers must be written on the back.
- The cards can only be read when a glass or jar of water is placed in front of the card.
- The cards should be palm-card size, or the size of the glass of water being used.

SUGGESTED MATERIALS:

- glass or jar of water
- card
- markers



Physical sciences

Project 1

Secret quiz

- Research what light refraction is and how light travels from air to a glass of water to affect what we see. Explore how the cards will need to be written so they can be read when a glass of water is placed in front of them.
- Plan and write a list of questions that the cards will be based on.
- Collect the materials you will need, including a glass or jar of water, card and markers.
- Create the quiz cards according to the planned questions.
- Check that the question cards meet the criteria.
- Give a presentation explaining what special way the cards were written and the effect of placing the glass of water in front of them. Conduct the quiz with another group.

