Pot holder

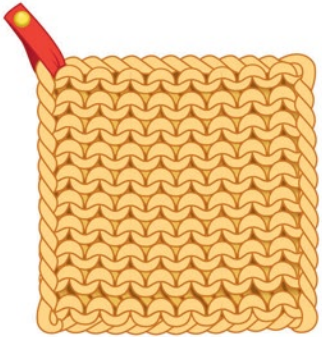
Project task:

Design and create a colourful, thick pot holder that can hang in the kitchen.

Project ideas:

woven pot holder

sewn pot holder



finger-knitted pot holder

PROJECT 1

Pot holder

1. INQUIRE

What is a pot holder? How is it used? Why does it need to be thick? What are some different ways to make pot holders?

2. IDEATE

What method will you use to make your pot holder? How will you hang your pot holder? How are you going to make it thick and colourful? What materials, tools and equipment will you need?

3. PLAN

Draw and label a design for your pot holder, then draw or write the steps to show how you will make it. Collect your materials, tools and equipment.

4. CREATE

Create your pot holder. Do you need help using the tools and equipment?

5. EVALUATE

Use your pot holder to lift a warm pot. Does it work? Is it thick enough? Is it colourful? Can it be hung? Is there anything you would change?

6. SHARE

Hold your pot holder by its hook/loop to display it. Tell how you made it. Tell what you are going to do with it. Will it be a gift? Will you use it at home?

3D town map

Urban planners decide where buildings, parks, roads and other features should be located in a city based on the needs of the people who live there. They create maps of their design so others can visualise their ideas. Various construction workers then use these maps to build the city.

Project task:

Design and create a three-dimensional map of a town which shows the location of a range of natural and built features.

3D town map

1. INQUIRE
Which natural and built features might you see in a town? Why? How are towns designed to meet people's needs and wants?

2. IDEATE
What natural and built features will you include? Where will these features be located? How will people access each feature?

3. PLAN
Draw a bird's-eye-view map of your town and label the natural and built features. Plan how each feature will be made and attached.

4. CREATE
Collect the materials, tools and equipment you need. Construct each feature and assemble them to make your map.

5. EVALUATE
Evaluate the design of your map. Did it include a range of natural and built features? Could people access places easily?

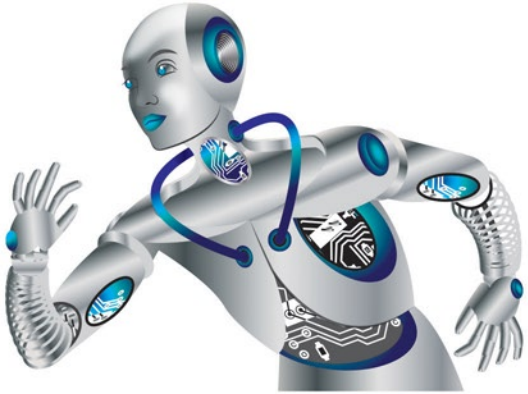
6. SHARE
Record a short radio advertisement encouraging people to move to your new town by highlighting its design and key features.

Recycled robot

The world's first artificially intelligent robot was revealed in 2016. Her name is Sophia and she is very human-like. Her face is made from frubber, which is a flesh-like rubber, and nano-tech skin which lets her make human-like facial expressions. She was even made a citizen of Saudi Arabia!

Project task:

Design and create a robot head and body made from recycled materials, that is at least one metre tall, is able to stand up by itself and has movable body parts.



Recycled robot

1. INQUIRE What is a robot? What are robots used for? How do robots move? What materials are robots made from? What is artificial intelligence?

2. IDEATE What materials will you use to make your robot body? How can you make your robot look real? What will you use for body parts that will be suitable for your robot to move properly?

3. PLAN Draw a diagram of your robot. Label the materials you will use to make each part. Decide how your robot will be able to move its body parts, and what kind of look and style you want it to have.

4. CREATE Collect the materials, tools and equipment you need. Safely create your robot and test that it can stay standing and move some body parts.

5. EVALUATE Did your robot stay standing? Did it have arms or legs that could bend? Were the materials you chose suitable? Would using other materials make your robot stronger or better?

6. SHARE Display your robot to the class. Write an interview script between you and the robot. Use a robot voice generator website to type your robot's answers and save them as audio files. Conduct your robot interview in front of the class and play you robot's answers after each question you ask. Was your robot convincing?