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The travelling space buggy

Space technology

time

60 minutes

learning outcomes

To:

- find out what is needed for a vehicle to travel along
- know what specifications a space buggy must meet to be able to travel on a bumpy surface

end product

- a space buggy

materials needed

- photograph of Mars Lander (Appendix)
- 12 1-litre drink cartons
- 12 containers
- coloured card
- wooden skewers
- scissors
- glue
- paint
- toilet paper rolls
- large and small buttons
- container with sand and stones

Preparation

For the activity **Move it** you will need a block trolley and a doll's pram or buggy. You will need the photograph of the Mars Lander from the Appendix.

For the activity **Your space buggy** you will need 12 containers with scissors, glue, paint, toilet roll tubes, large and small buttons, wooden skewers, coloured card, and a milk carton. You will also need a large container with sand and stones for the children to test their space buggies in.



Move it 30 min.

Take the children outside. Show the block trolley and the doll's pram or buggy. Where will the trolley and the pram or buggy be able to move best, on the playground or in the sandpit? Encourage several children to have a go moving the trolley and the pram or buggy. Now take a few blocks out of the trolley and put them on the ground. Ask the children to try pushing the doll's pram or buggy and block trolley over the blocks on the ground. Is this easy or difficult?



The children make a space buggy that can move across a bumpy surface, like the sandpit and over the blocks in the playground.



Your space buggy 30 min.

Take the children back to the classroom. Show the children the photograph of the Mars Lander. Explain that they are going to make a space buggy for Task 1 on the worksheet. Explain that the buggy:

- has to be stable and not easy to blow over;
- has to be able to move forwards;
- has to be able to move over obstacles;
- must be made using the items in the container.



Organise the children into pairs. Give each pair of children a container. Examine together the items that they can use. Explain that their space buggy should look as much like their design as possible. They can choose whether to use large or small buttons as wheels for their space buggy.

The children make a space buggy. Give assistance where needed.



Once again, sit in a circle with the children. Ask them to bring their space buggy. What do the buggies look like? Does each buggy look like its design?

Encourage the children to test their space buggy.

- Is it strong? Encourage the children to blow against their buggy to see if it falls over.
- Can it move over obstacles? Challenge the children to move their buggy through the container with sand and stones.

Discuss which was the best space buggy. What do they notice about this buggy that makes it better than the other space buggies?

Encourage the children to adapt their space buggies so that they are better able to meet the requirements. For example, they could make them heavier; they could change the position of the wheels, or use larger or smaller wheels.



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worksheet

The travelling space buggy

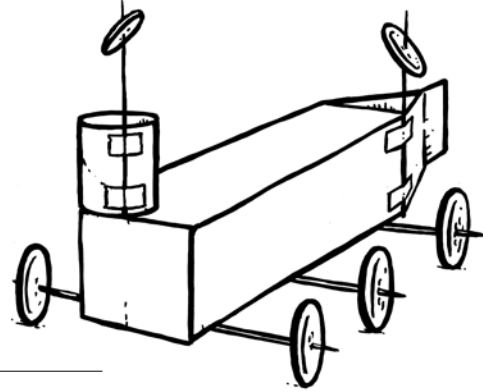
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Your space buggy



Make a design for your space buggy.

You can see an example in this drawing.



draw HERE
the design
for your
space
buggy



