



Rocket shapes

Rockets

time

65 minutes.

learning outcomes

To:

- recognise a number of geometric shapes: a circle, a triangle, a rectangle, and a square
- know what a rocket looks like
- know what a rocket launch sounds like

end product

- a rocket made up from two-dimensional shapes
- a rocket made up from three-dimensional shapes

materials needed

- photograph of rocket (Appendix)
- computer with internet
- glue
- A4 paper
- wooden building blocks

Preparation

For the activity **Exploring the rocket** find a short film of a rocket launch on the internet. Tip: enter 'rocket launch' as a search term.

For the activity **Design your own rocket** you will need the photograph of the rocket from the Appendix. Cut out 24 triangles, 24 squares, 24 rectangles, and 24 circles from A4 paper.



Exploring the rocket 20 min.

Sit in a circle with the children. Ask the children if they know what a rocket is. Show the photograph of the rocket. Where does a rocket go? Explain that rockets can go into space. Explain that some kinds of fireworks are also called rockets. Ask them whether they have ever seen a firework rocket. What kind of sound does a real rocket make? Show them a short film of a rocket launch. Ask the children if they can hear what sound it makes. Ask the children to crouch on the ground. Count down from 10 and encourage them to jump in the air, while making the sort of sound they think a rocket would make.



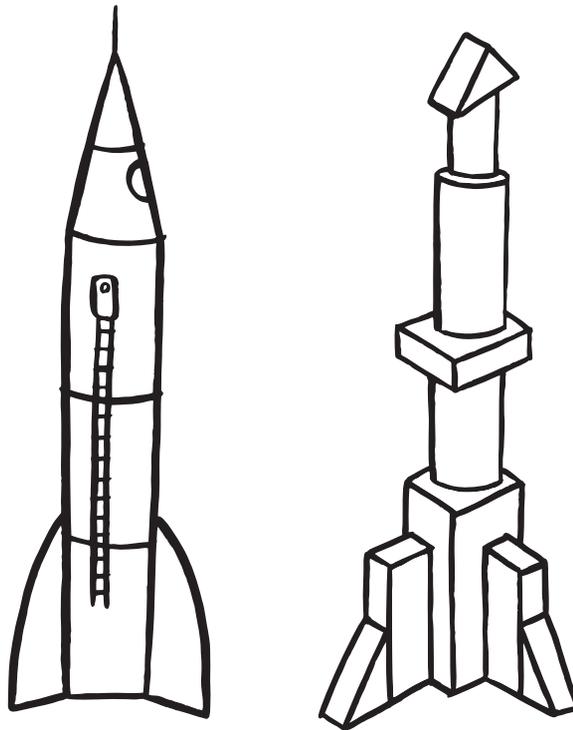
The children use different shapes to make a rocket.



Design your own rocket 10 min.

Once again sit in a circle with the children. Show the drawing of the rocket made from blocks on the following page. What shapes do the children recognise in this rocket made from blocks? If you were going to make a rocket, what would you have to pay attention to? Come to an agreement on the following requirements:

- the different parts of the rocket need to be joined together;
- the rocket ends in a point.



Organise the class into pairs. Give each pair two paper triangles, two squares, two circles, and two rectangles. Encourage the children to name the shapes. Explain that they are going to use the shapes to make their own rocket. Make sure the children use as many different shapes as possible. The children paste their rocket on the worksheet.



Build your own rocket 15 min.

The children use the rocket design on their worksheet to build a rocket using wooden building blocks. Encourage them to use the different shapes. Make sure each pair of children has enough blocks. The children build the rockets at their table and leave them standing.



Spot the difference 10 min.

Do the rockets made from blocks look like the designs on the worksheets? Do the rockets meet the requirements? Go over the requirements of the design once more. Encourage the children to name the shapes. Show again the photograph of the rocket from the Appendix.

Do they recognise any shapes in the rocket?



Flat or round? 10 min.

Discuss the different shapes in the rocket. Lay out several of the pasted rocket worksheets next to the rocket models on the tables. Ask what differences there are between the paper rockets and the rockets made from blocks. The paper rockets are flat, and the rockets made from blocks are round. The paper rockets can only lie flat on the table, but the rockets made from blocks can stand up by themselves.



17 worksheet

