

Design and Technology

Rockets



Overall Learning Objective:

We are learning to investigate, design, make and evaluate a rocket that can fly.

Thursday 4th February

Learning Objective

Today we are learning to design a rocket.

Success Criteria

I will be successful if:

- I can decide on design criteria (features a good rocket has.)
- I can come up with four possible designs for my rocket.
- I can consider materials and tools required for my rocket.
- I can plan out the steps needed to make my rocket.

Rocket Designs

Today we are going to generate ideas to create a design for our rocket.

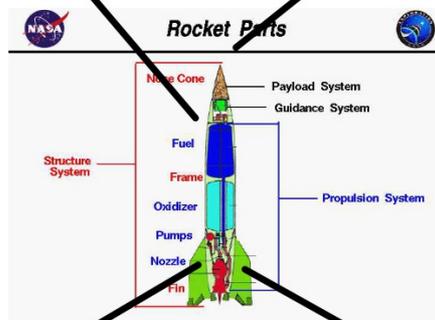
First we need to create our design criteria.

These are the features that our rocket will have. This will help us with our designs and our evaluations when we have made our products.

What are the features of a good rocket?

Body tube which is long, smooth and cylindrical.

Nose cone which is pointed.



Materials (e.g. aluminium/titanium) which are strong so the rocket won't fall apart during launch and light so the rocket can take off from the ground and fly!

Exhaust which will allow spent fuel to escape.

Fins which are flat and thin.

Design and Make a Rocket
Rocket Designs



Design Criteria

- _____
- _____
- _____
- _____

Draw annotated pictures of your designs.

Now think about which one you would like to be your final design. Indicate which design you have selected to make and explain why.

What tools/equipment will you use?

What materials will you use?

How will you join your materials?

How will you make your rocket aerodynamic?

How will you make it? (Use numbered steps and time connectives e.g. *Firstly, Next* etc.)

Rocket Designs

Materials you could use for decoration



Ways to join materials

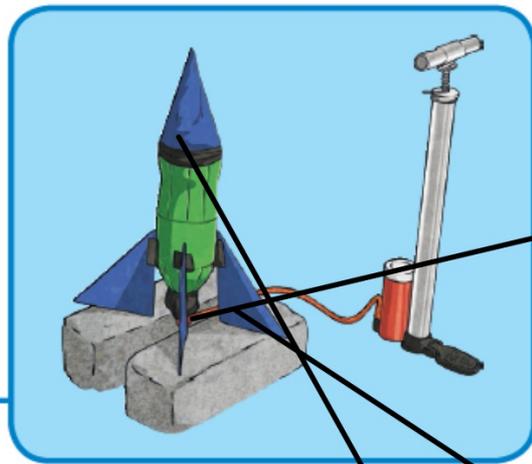


Tools/Equipment

scissors
ruler
pencil/pen etc.
circle shape

card
paper
foil
cellophane
tissue paper
paint
foam
straws
cellotape
masking tape
string
pipe cleaners
cork
sequins
buttons
colouring pens
colouring pencils

Rocket Designs



You will use a cork for the exhaust.



You will also need materials for your nose cone and fins.