Design Technology

Investigating Rolling

We are going to make a toy which rolls.

Lesson 1

To investigate how different objects move.

What does the word rolling mean?
Can you think of something which rolls?

What does slide mean?

Today we are going to investigate some different objects.

Will it roll, slide or stay?











We are going to predict what we think will happen.

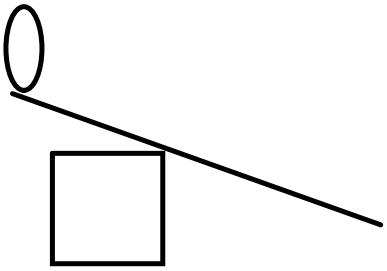
| Object | Predication | What happened |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

Now we will investigate.

Place a book on a box to make a ramp.

Put your object at the top.

Will it roll, slide or stay?



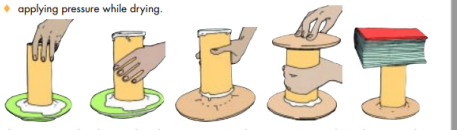
Lesson 2

To investigate how to join.

**Method 1 – dipping in PVA glue and leaving to dry**

Show the children how to dip each end of the tube into PVA glue and position onto the wheels as shown below. Note the importance of the following:

- positioning the tube centrally;
- leaving to dry (overnight preferably);
- applying pressure while drying.

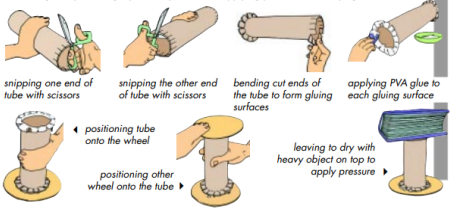


*dipping one end of tube into PVA glue* | *dipping the other end of tube into PVA glue* | *positioning tube onto wheel* | *positioning other wheel onto tube* | *leaving to dry; heavy object on top to apply pressure*

**Method 2 – cutting tabs in the body and gluing with PVA glue**

Show the children how to cut small slits into each end of the tube to form tabs and to bend them out to form a gluing surface to attach the wheels. Note the importance of the following:

- cutting carefully;
- positioning the tube centrally;
- leaving to dry (overnight preferably);
- applying pressure while drying.



*snipping one end of tube with scissors* | *snipping the other end of tube with scissors* | *bending cut ends of the tube to form gluing surfaces* | *applying PVA glue to each gluing surface*



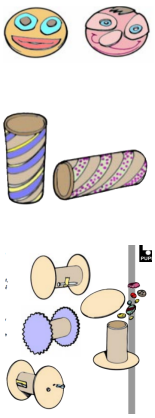
*positioning tube onto the wheel*

*positioning other wheel onto the tube*

*leaving to dry with heavy object on top to apply pressure*

Lesson 3

To design a roly poly toy.





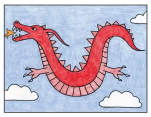


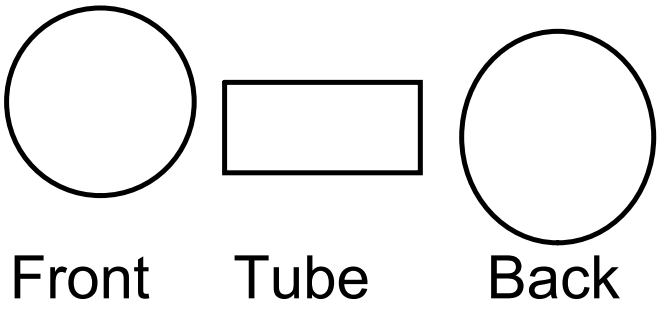












Front
Tube
Back

Lesson 4

To create our roly poly toy.

Look at your design sheet
from last week and tell
your partner what your
roly poly toy is going
to look like.

Today we are going to start to make
our roly poly toy.
Remember to keep looking at your
design sheet.

Lesson 5

Fixing our roly poly toy together.