



Lighting it up - Planning session





Learning objectives



Understand that lights are designed for particular uses.

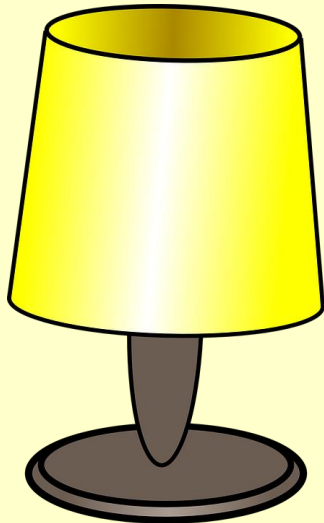
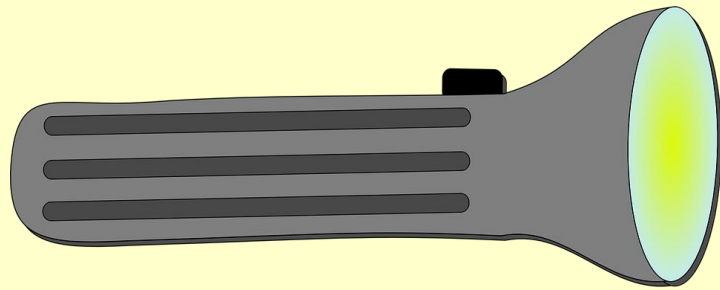
Understand that lights are made from various materials which are suited to a particular purpose.

Understand how different switches work.

Think of creative uses for everyday materials.



What are these lights for?





How does a torch work?



Which part: Switches it on?

Supplies power?

Produces light?

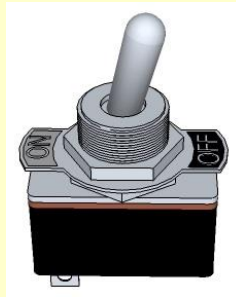
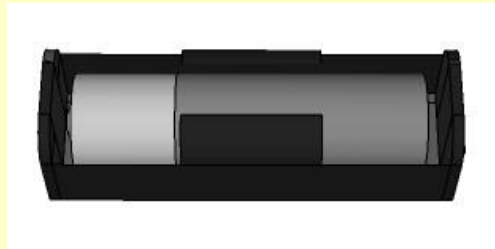
Reflects light forwards?

Allows light to pass through?

Allows you to change batteries?



What you are given..



You can also bring in recycled items from home.



Types of switch..



You can choose from three different types of switch:

Toggle switch



Slide switch



Push to make switch



How do these work?



Design Criteria



What would you like your design to do?

For example:

- Look nice?
- Be easy to carry?
- Be easy to point at things?
- Be able to change the batteries?
- Be bright?



What you need to collect



You can collect things to use in your light, e.g.

Something to hold your battery?

Something see through?

Something reflective?

You need items which are strong enough, but you can still cut them with scissors.

Don't bring in anything which can hurt you, like an aluminium drinks can.



Preparation



Fill in the first two pages of your worksheet.
If you see anything being thrown away at home which would be useful for your light, ask if you can keep it.
You can collect things for your friends too.

