Evaluation, design and communication skills

Mechanisms are designed to do different jobs to make the task we have to do much easier. All mechanisms have the following in common:

- They make a job easier to do.
- They involve some kind of movement.
- They involve some kind of force.

1.1 Mechanisms found in the modern kitchen

Without even realising it we use mechanisms or tools on a daily basis. We use knives, spoons, door handles and light switches every day. Each one of these mechanisms has a different function and is designed to perform that function. For example, a lever is used to open a tin of paint or a pulley is used to lift something heavy.

Mechanisms are designed to do different jobs to make the task we have to do much easier. All mechanisms have the following in common:

- They make a job easier to do.
- They involve some kind of movement.
- They involve some kind of force.

- They need some kind of input to make them work.
- They produce some kind of output.



FIGURE 31 Mechanisms in the modern kitchen

LIVEWORKSHEETS

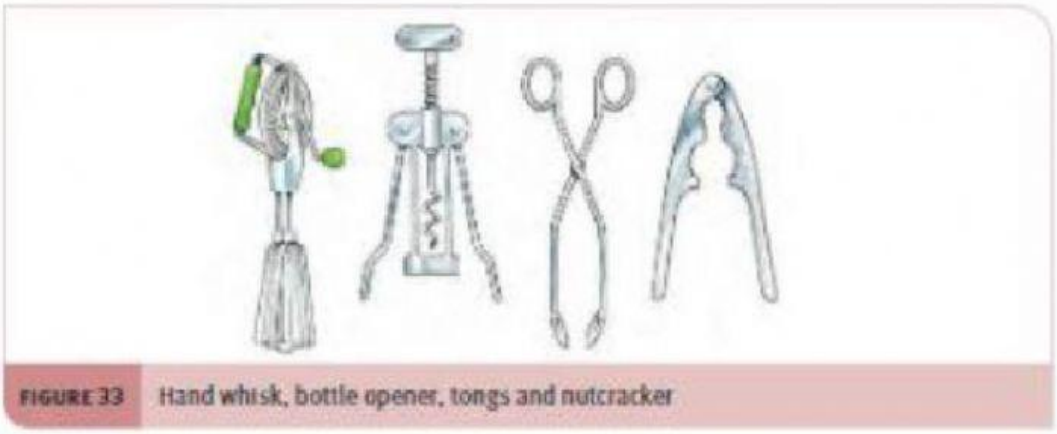


FIGURE 33 Hand whisk, bottle opener, tongs and nutcracker



FIGURE 34 Garden tools

1.2 Mechanisms found in the workshop or garage

Study FIGURE 34. How many different garden tools can you identify? Do you think this gardener takes good care of his tools?

We use mechanisms or tools when we want to fix something or build something we need. We use hammers, pliers, wrenches, vice grips, wire strippers and ratchet spanners. Each one of these mechanisms has a different function and is designed to perform that function. Do you recognise the tools in FIGURE 35? Can you say what they are used for?



FIGURE 35 Pliers, screwdriver, hacksaw and drill

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Activity 1 Evaluate mechanisms

You have to evaluate three different mechanisms. Write a report on each of them. In your report you have to evaluate each tool in terms of the following:

- Who is it for?
- What is it for?
- Will it do the job?
- What material is it made of?
- Is the material suitable?
- What should it cost?
- Does it look good?
- Is it safe to use?

1.

2.

3.

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Answers

1.

2.

3.

4.

5.

6.

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