

# higher education & training

Department: Higher Education and Training REPUBLIC OF SOUTH AFRICA



#### SUBJECT: FOUNDATIONAL SCIENCE

#### LEVEL: PLP

#### **MODULE/CHAPTER NO: MODULE 3**

UNIT 4.2 ELECTRICITY AND MAGNETISM

### **UNIT 4.2 ELECTRICITY AND MAGNETISM**

After completing this topic, you will be able to:

- 1. Define magnetism
- 2. Distinguish between the three different types of magnets
- 3. Know the properties of magnets
- 4. Identify the similarities between electricity and magnetism

#### **UNIT 4.2 ELECTRICITY AND MAGNETISM**

## 4.2.4 The similarities between electricity and magnetism

• Both electric forces and magnetic forces are noncontact forces (can work over a distance).

• Both types of forces can be **repelling** forces as well as **attracting** forces.

• Both forces are produced by the **electric charges** inside atoms.

#### Activity 4.5 Uses of magnets (Practical)



For this activity, work in groups. This means that you must work with three or four other people.

Your lecturer will provide you with a sheet of flipchart paper and pens. You need to:

- Research on the Internet or from books to learn more about the everyday uses of magnets and electromagnets.
- 2. With you information you need to build a poster to show what you have found. You can write, you can use pictures imagine that you are explaining this to someone who knows nothing about magnets!
- When you are done you will present your poster to the rest of the class decide among your group who will present what, all of you have to present something.
- 4. Take a photo of your poster and print it. Paste it into your workbook.

#### SOLUTIONS

Students must present their own posters.