

## FIRST AND SECOND CLASSES – MAGNETISM & ELECTRICITY

### Teacher Guidelines:

- Pp. 96-106

### Linkages:

- Materials - Properties and characteristics
- Light

### Integration:

- Oral Language Development – English and Gaeilge
- SPHE
- History

## FIRST AND SECOND CLASSES – MAGNETISM & ELECTRICITY

### Content Objective:

- **USE MAGNETS OF DIFFERENT SHAPES AND SIZES IN PURPOSEFUL PLAY TO EXPLORE THEIR EFFECTS ON DIFFERENT MATERIALS.**

*Design and make a fishing game using a magnet.*

### Some suggested activities:

- Brainstorm what magnets are and what can they do?
- Where would you find magnets? At home? At school?
- Distribute a range of magnets and allow children play with them. Discuss what they notice?
- Make sculptures e.g. matchstick figures, house etc. with magnets.

### Some suggested designing and Making:

- Fishing game

## FIRST AND SECOND CLASSES – MAGNETISM & ELECTRICITY

### Content Objective:

- **INVESTIGATE THAT MAGNETS ATTRACT MAGNETIC MATERIALS, SUCH AS IRON AND STEEL.**

### Some suggested activities:

- Predict and test a range of common items to see if they are magnetic or non-magnetic (paper clips, erasers, pencils, coins, crayons, kitchen foil, rubber bands, bottle tops, corks etc.) What items are attracted/not attracted to the magnets? What materials are these items made from?
- Were all metal objects attracted to the magnets? Predict and test other metal items in the room.
- Game: Flying Paper Clip – attach a paper clip to one end of a string, attach the other end of the string to the desk with blu-tac/sticky tape. Can the pupils make the string rise up using a magnet but not touching the paperclip?
- Can pupils find other objects they can attach to the string in place of the paperclip?

### Some suggested investigations:

- Which is the best magnet? Exemplar 29 p 106

### Some suggested designing and making:

- Magnet games: Get the car to go around the track using a magnet

## FIRST AND SECOND CLASSES – MAGNETISM & ELECTRICITY

### Content Objective:

- **INVESTIGATE THAT MAGNETS ATTRACT CERTAIN MATERIALS THROUGH OTHER MATERIALS.**

*Magnets attracting materials through water, glass and plastic*

### Some suggested activities:

- Predict and test whether magnet will work through sheet of paper; glass bottle; plastic copy cover, fabric, desk (wood); kitchen foil; baking tray.

### Some suggested investigations:

- Through how many sheets of paper or card will the magnet work.

### Some suggested designing and making:

- A race track for paper clips through which the paperclips are guided by a magnet held under the page of paper/card.
- A magnetic maze

## FIRST AND SECOND CLASSES – MAGNETISM & ELECTRICITY

### Content Objective:

- **EXPLORE THE EFFECTS OF STATIC ELECTRICITY**

### Some suggested activities:

- Charge balloon with wool. Hold near hair or pieces of paper. Observe what happens. Test with Rice Krispies, salt, pepper, paper clips, match sticks.
- Exemplar 25, p. 99 – Why does my hair crackle when I comb it?

### Some suggested investigations:

- Investigate what other materials will charge the balloon? (paper, plastic, nylon, J-cloth, tracksuit)  
Exemplar 25 p99

## FIRST AND SECOND CLASSES – MAGNETISM & ELECTRICITY

### Content Objective:

- **BECOME AWARE OF THE USES OF ELECTRICITY IN SCHOOL AND AT HOME and /or IDENTIFY SOME HOUSEHOLD APPLIANCES THAT USE ELECTRICITY**

### Activities:

- List appliances that use electricity.
- Sort appliances into those that need mains/battery.
- Survey of rooms at home for numbers of electrical appliances. Which room has most appliances?
- What would life be like without electricity?

## FIRST AND SECOND CLASSES – MAGNETISM & ELECTRICITY

### Content Objective:

- **BECOME AWARE OF THE DANGERS OF ELECTRICITY**

### Some suggested activities:

- Hold a class discussion about electrical safety.
- Show video “Be Safe”.