This and that: Looking at toys

Primary Lesson Plan

This lesson plan was developed by Curriculum Corporation.

Source
Oodles of Noodles: Early Years (Integrated Units Collection)

Learning areas
Technology

Level
Lower primary (K–2)

Description
In this unit students investigate how a toy works and construct one. There is a focus on students thinking about their intentions, designing appropriately and appraising their achievements. Problem solving, cooperative group work, discussion and drawing are featured. Students use estimation and informal units of measurement to make their constructions. The introductory activity from the unit is presented here.

Purpose
Students are introduced to aspects of technology through investigating the design and construction of toys.

Duration
2-3 sessions

Possible outcomes
In relation to the Technology — a curriculum profile for Australian schools, work on this activity could lead to the achievement of outcomes in the following strands:

- Designing, Making and Appraising
- Materials
- Systems

There will also be links with other learning areas such as English and Mathematics.

Materials required
- student collection of toys with moveable parts
- a selection of toys suitable for disassembly
- commercial construction materials
Procedure

1   Talking about toys

As a class, talk about the importance of toys and why people like them. Discuss:
- the importance of toys in our lives
- the features of particular toys that make them different and more fun (for example, more than one person can play with them at a time)
- movement of the toy and how it happens
- aspects of design (colour, materials, functions, ease of use)
- safety considerations (for example, no sharp edges)
- different settings for toys and who uses them (for example, inside or outside, different ages)

2   Looking at toys with moveable parts

Invite students bring to class a range of toys with moveable parts, for example, a crane, a wind-up toy, a doll with moveable arms and legs and a Jack-in-the-box. As a class, discuss and describe their features. Focus on:
- materials used
- description of size
- interesting construction features.

Ask students to take turns to demonstrate the features of the toy they have brought from home and talk about why it is their favourite.

Ask them to describe the parts that move and what makes them move.
Ask:
- Do they all move in the same way?
- In what ways are the movements different?

As a class, decide on some classifications for the toys and group them according to how they move (battery operated, on wheels, jointed, pulley movement and so on).

3   Investigating toys and their movements

Provide some additional toys or kits that may be taken apart and put back together again. Arrange students in groups and ask them to examine the toys and their movements closely.

Provide tools for students in groups to disassemble the toys in order to discover how they are put together and how any movements are actually made. (Consider safety when taking toys apart. Help from an adult or an older student might be advisable.)

Encourage students to identify what has to be done to make the toy work.
Ask:
- How are these parts joined together?
- Explain your ideas to other group members.
Suggest that students examine the materials that have been used. Ask them to identify the feel, look and origin of the materials and suggest reasons for that selection. Discuss aspects of materials such as resistance, strength, pliability.

Develop a wall chart to summarise the groups' findings about the materials of the toys. Headings might include materials, strength, appearance, colour, durability (resistance to wear).

**Extension activity**

Set up an 'I'm an engineer' work area in the classroom. Include commercial kits and especially diagrams and instructions for building toys. Provide a range of everyday resources such as junk materials, glues, fasteners, tape, staplers, card, paper, containers, pipe cleaners, decorative materials, paint, crayons, toothpicks, satay sticks, styrofoam, foam pieces and wooden pegs. Provide opportunities for students to investigate, experiment and complete simple construction and design tasks.

**Acknowledgements**

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