Bollin Primary School

Growing hearts and minds together

Lego WeDo 2.0

Guided Projects Overview

Curriculum links

National Curriculum for science

(See page 23 for how this project addresses non-statutory requirements, and requirements for working scientifically)

5.F.s3: Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

Other National Curriculum links

Design and technology

Design:

Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.

Generate, develop, model, and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces, and computer-aided design.

Evaluate:

Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.

Technical knowledge:

Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers, and linkages].

Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers, and motors].

Apply their understanding of computing to program, monitor, and control their products.

Computing

Design, write, and debug programs that accomplish specific goals, including controlling or simulating physical systems.

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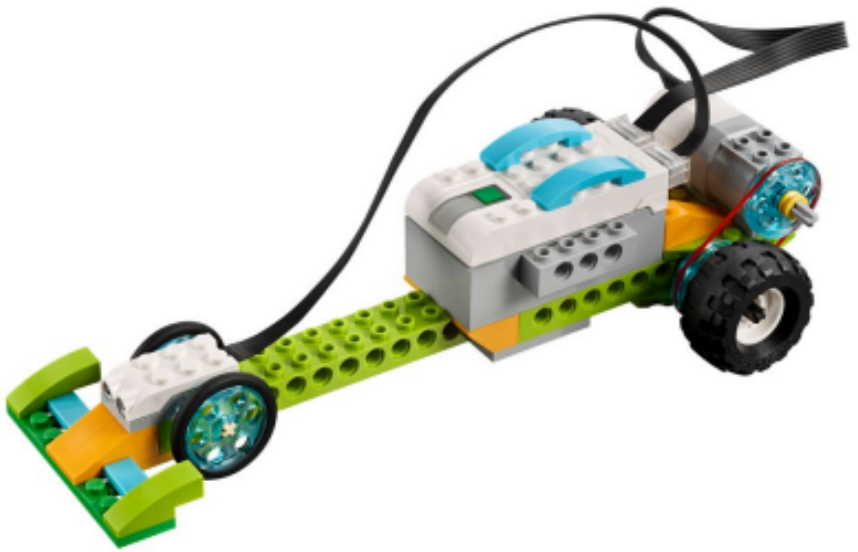
Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems, and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.



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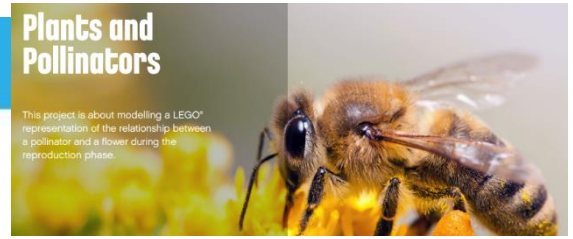
3.A.s1: Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.

4.LTH.s3: Recognise that environments can change and that this can sometimes pose dangers to living things.
4.A.s3: construct and interpret a variety of food chains, identifying producers, predators and prey.

5.LTH.s1: Describe the differences in the life cycles of a mammal, an amphibian, an insect, and a bird.
5.LTH.s2: Describe the life process of reproduction in some plants and animals.
5.F.s3: recognise that some mechanisms, including levers, pulleys, and gears, allow a smaller force to have a greater effect.

6.LTH.s1: Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro- organisms, plants, and animals.
6.LTH.s2: Give reasons for classifying plants and animals based on specific characteristics.
6.El.s2: Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
6.El.s3: Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.



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3.P.s1: Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.

5.LTH.s1: Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
5.LTH.s2 Describe the life process of reproduction in some plants and animals.
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3.FM.s1: Compare how things move on different surfaces.

5.F.s2: Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.
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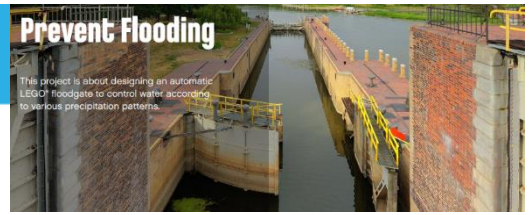

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4.SM.s3: Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

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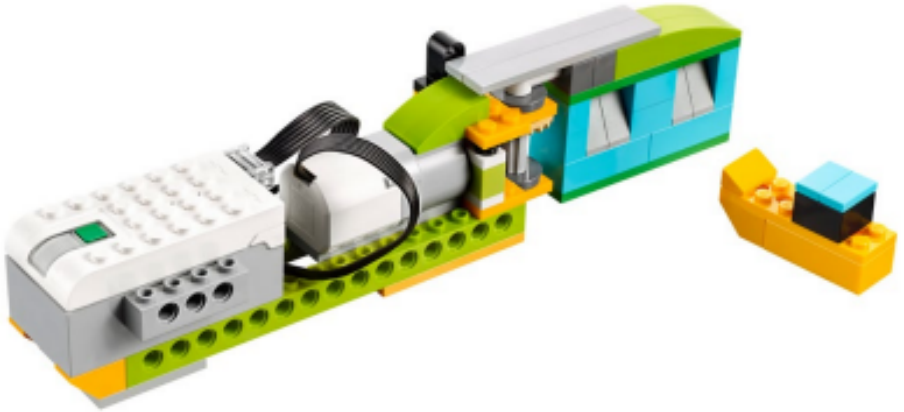
Geography

Human and physical geography:

Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.



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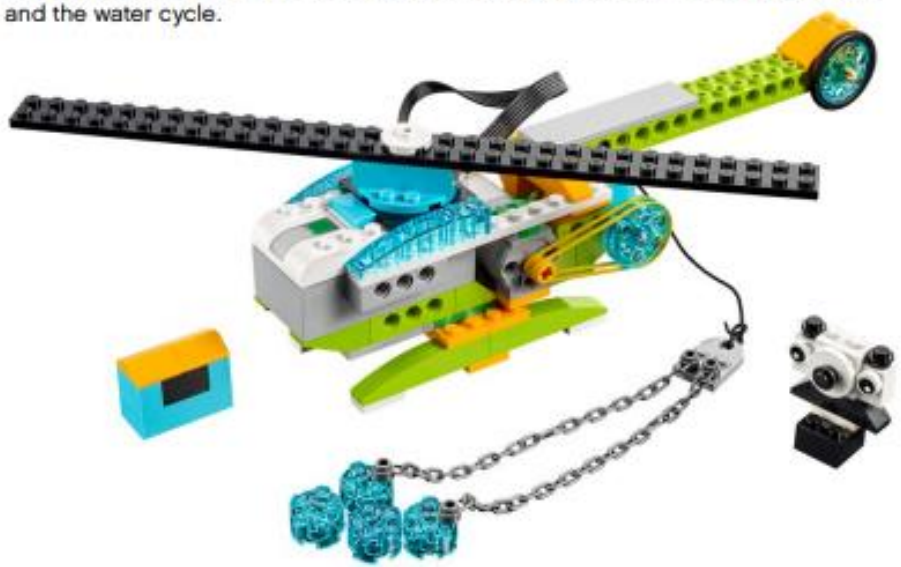

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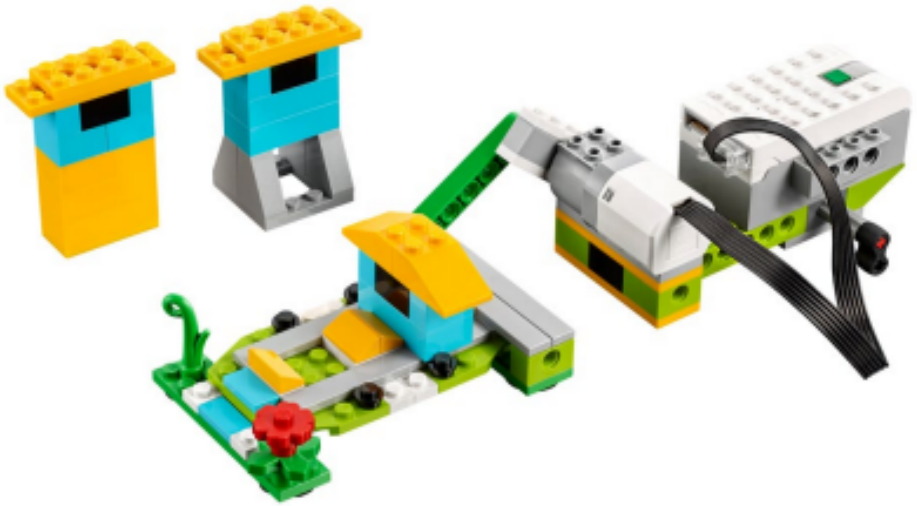

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