

# Leintwardine Endowed CE Primary School Learning Journey Itinerary

'Letting Our Light Shine'

SUBJECT : DT

YEAR : B

TERM : Spring 2

YEAR GROUPS : 3/4

## Key Question: Can I make my own toy?

Previous Knowledge – How to evaluate a product. How to take inspiration from other products. Know that some products move by mechanisms.

### END OF UNIT OBJECTIVES

Some children will not yet have met what is expected and will show that they are **emerging** because they can:

- with support, recognise the movement of a mechanism within a toy or model.
- following a guide, understand that a cam mechanism will change rotary motion into linear motion.
- start to investigate examples of cam toys and comment on how they work.
- describe how cams work using some key vocab.
- explore how different shaped cams affect the movement of the follower.
- with help, make suggestions for how different cams could be used for different kinds of toys.
- start to think about how I could make a sturdy structure for a moving toy.
- start to experiment with a variety of materials, tools and techniques.
- with support, find ways of strengthening a structure.
- state the purpose and audience of their design.
- design a moving toy with a cam mechanism.
- using simple description, describe how I will create my toy and what materials and tools I will need.
- follow a design to create a moving toy.
- with guidance, work safely with a variety of materials and tools.
- identify a few areas of my toy that could be improved upon.
- evaluate a finished product.
- suggest ways I could improve my product if I were to make it again.
- recognise ways in which I have been successful.

Most children will show that they have reached the **expected** level because they can:

- recognise the movement of a mechanism within a toy or model.
- understand that a cam mechanism will change rotary motion into linear motion.
- investigate examples of cam toys and comment on how they work.
- describe how cams work using appropriate vocabulary.
- explore how different shaped cams affect the movement of the follower.
- make suggestions for how different cams could be used for different kinds of toys.
- make suggestions for how I could make a sturdy structure for a moving toy.
- experiment with a variety of materials, tools and techniques.
- identify ways of strengthening a structure.
- state the purpose and audience of their design.
- design a moving toy with a cam mechanism.
- describe how I will create my toy and what materials and tools I will need.
- follow a design to create a moving toy.
- work safely with a variety of materials and tools.
- identify areas of my toy that could be improved upon.
- evaluate a finished product fairly.
- suggest ways I could improve my product if I were to make it again.
- recognise ways in which I have been successful.

Some children will have gone beyond the expected level and will show that they are **exceeding** because they can:

- recognise the movement of a mechanism within a toy or model and name the types of movements correctly.
- understand that a cam mechanism will change rotary motion into linear motion.
- investigate examples of cam toys and comment on how they work.
- name and describe how cams work using appropriate vocabulary.
- explore how different shaped cams affect the movement of the follower and describe where they will be suitable in toys.
- make suggestions for how different cams could be used for different kinds of toys.
- make suggestions for how I could make a sturdy structure for a moving toy.
- experiment with a variety of materials, tools and techniques.
- identify ways of strengthening a structure and explain how they work.
- state the purpose and audience of their design.
- independently design a moving toy with a cam mechanism.
- in detail, describe how I will create my toy and what materials and tools I will need.
- follow a design to create a moving toy.
- work safely with a variety of materials and tools.
- identify areas of my toy that could be improved upon.
- evaluate a finished product fairly.
- suggest ways I could improve my product if I were to make it again.
- recognise ways in which I have been successful.

### ASSESSMENT OPPORTUNITIES – Class discussions, work produced in lessons, final end of unit product.

#### ENRICHMENT

#### OPPORTUNITIES

Helping children to remember more

Creating their own moving toys.

Take inspiration from other moving toys.

#### SUBJECT SPECIFIC VOCABULARY

movement, mechanism, model, cam, materials, techniques, strengthen, structure, improved, purpose, audience, follower, linear motion, motion, evaluate

#### CROSS-CURRICULAR

#### LINKS

Links that we can make to help children make sense of what we want them to know and be able to do.