

## PREPARATION

THEME: MAGNIFICENT MACHINES

### MYSTERY BAG

TOY (OR REAL) TOOL, E.G. SAW, HAMMER, SCREWDRIVER

# EXPLORATION RESOURCES

- SELECTION OF ANY HARDBACK BOOKS, CARDBOARD, TRAIN TRACKS, AND/OR TRAYS
- STRING OR WOOL
- PAPER CUP OR SMALL YOGURT
  TYPE POT
- COINS OR SMALL STONES
- TAPE
- SELECTION OF ANY TOY
  CARS/TRAINS, APPLE, OTHER
  TOYS OR FRUIT
- ONE EGG

### EXPIORATION

### THEME: MAGNIFICENT MACHINES

S T E M M
Science Technology Engineering Arts Maths

#### Questions/Ideas:

Inclined Planes: How can we help your toy to get up to here?

Can we build a ramp/inclined plane? Can you make it

steeper/less steep? Which one is shorter for the toy to walk

up? Which do you think would be easier for it?

**Testing Inclined Planes:** How many pennies do you think it will take to move this [car] up the inclined plane? What about this [apple]? Let's count to find out.

Rolling Down Inclined Planes: We need to get this egg safely to the ground. Can you build an inclined plane to get it there gently? Now can we try to get it down from a higher starting place?

Noticing Inclined Planes: Where can we see inclined planes?
(Start to notice these around you - car park ramps, lorries unloading, slides etc.)

#### Learning:

<u>Science</u>: Predictions; Measuring; Comparisons; Inclined planes

<u>Engineering</u>: Simple Machine: Inclined Planes; Building inclined

planes; testing and improving inclined planes

Maths: Counting weights to lift; Vocabulary: more/fewer, steeper/less

steep, shorter/longer

