Design & Technology Linkage & Lever Cards Year 3

| Key Vocabulary |  |  |
|----------------|--|--|
| Card           | Paper that is thicker that standard—often more sturdy                        |  |
| Linkage        | Two moving parts that are linked together and move in relation to each other |  |
| Lever          | A rigid bard resting or attached to a pivot point and used to lift or move.  |  |
| Split Pin      | A metal pin with two prongs designed to combing two pieces of paper          |  |
| Design         | The process of choosing elements or ideas to create something new            |  |
| Mechanism      | A system of parts working together in a machine.                             |  |
| Pivot          | The fixed point, pin or shaft on which a mechanism rotates/moves             |  |
| Rotate         | The movement of an object around a fixed point.                              |  |
| Affect         | The impact one object has on another.  |  |
| Symmetry       | The reflection of something in the opposing direction.                       |  |

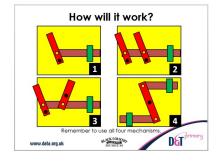






| In Year 3:  | In Year 4:              | In Year 5:  |  |
|---|-------------------------|---|--|
| Moving Cards<br>We will create cards that<br>can move using a range of<br>linkages and levers. Our<br>outcome will be a card that<br>can be given to someone. | an axle and wheels, in- | Cam Toys<br>We will use our<br>knowledge of axles and<br>frames to use one piece<br>of machinery to move<br>another, ensuring<br>accurate measurements. |  |

| Resources  |  |   |  |  |
|--|--|---|--|--|
| <ul> <li>Paper</li> <li>Pencil</li> <li>Ruler</li> <li>Card S</li> </ul> |  | • | Split pins<br>Colouring<br>pencils<br>Coloured Paper |  |



| What key knowledge will I have by the end<br>of this unit?  |
|---|
| <ul> <li>will know:</li> <li>How to design parts that will move in a diagram</li> <li>Draw exploded diagrams effectively</li> <li>Identify areas of weakness in a design</li> <li>How to choose appropriate pieces for specific purposes</li> </ul> |

What key skills will I have by the end of this unit?

I will develop the skill of:

- Drawing a plan that I will follow
- Practicing with experiments to help inform my design in the future.
- Measuring using a ruler accurately
- Drawing an attractive design based on a moving mechanism
- Test my design throughout the build