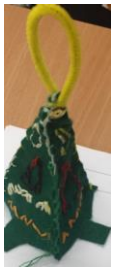
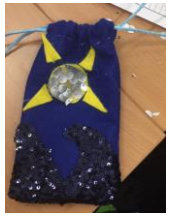
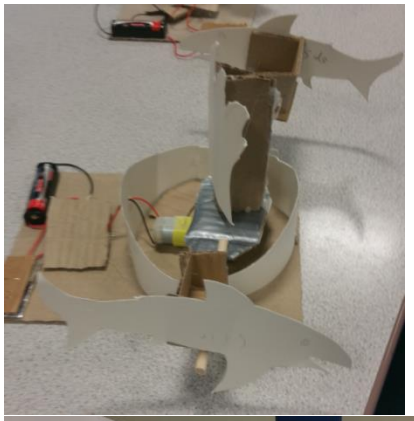
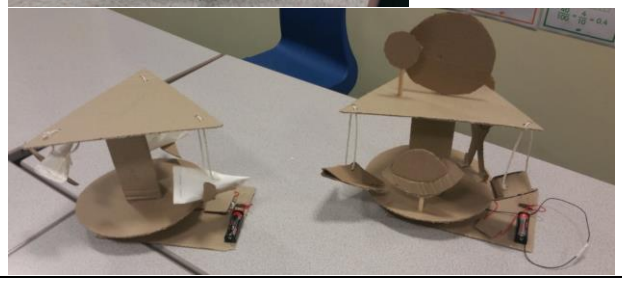
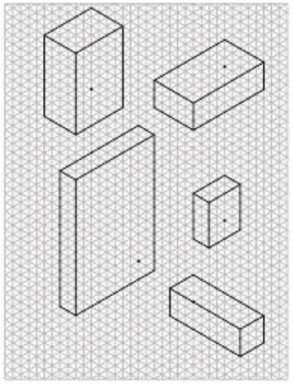
Design Technology LTP to be used alongside progression map			
	Autumn	**Spring**	**Summer**
Y1	Mechanisms: Sliders and levers Making a moving picture 	Food: Preparing fruit and vegetables Breakfast Pots	Mechanisms: Free standing structures. Chairfor a Bear   **Key individual Eileen Gray 1878-1976**
Y2	Mechanisms: Wheels and axles 4 wheel vehicles  **Key individual- Frank Hornby (famous toy maker)**	Food: Preparing fruit and vegetables Pizza	Textiles: Template and joining techniques Glove puppets 
Y3	Levers and Linkages Creatures and Critters  **Make workshop with Steph O'Donnell on Tuesday 7th September**	Food: Healthy and varied diet Creating healthy, balanced sandwich snacks with grown, caught and reared products **Key individuals- Jamie Oliver** *Exploded diagrams	Textiles: 2D shape to 3D product Pencil case/ types of stitching *Pattern pieces  

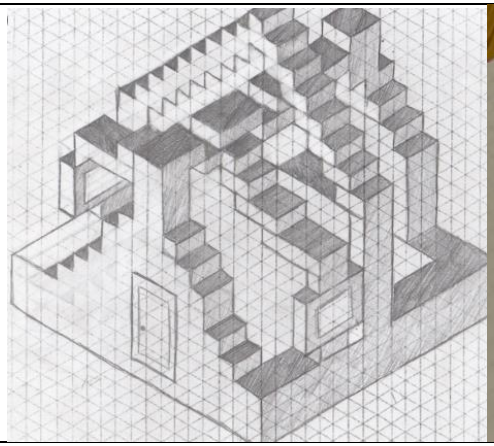
Y4	Electrical Systems: Nightlights   **Make workshop with Steph O'Donnell on Thursday 9th September** **Crumble → with MGL support** **Key individuals- Thomas Edison (and early versions of electric lamps)** *Cross-sectional diagram	Healthy and varied diet - Seasonal food and understanding how produce can be fresh, pre-cooked and processed. Seasonal food: A blini, stuffed peppers, _____ salad, rice cakes *Exploded diagrams	Mechanisms: Pneumatic/ Hydraulic systems  
Y5	Mechanisms: Wooden cam toy  **Key individuals- Mechanical engineer Abbie Hutty** *Use a grid to support 3D drawing skills *CAD	Textiles: Combing different fabric shapes     *Pattern pieces	Food: Celebrating culture and seasonality Exploring nutrition through soup Soups . *Exploded diagrams if applicable

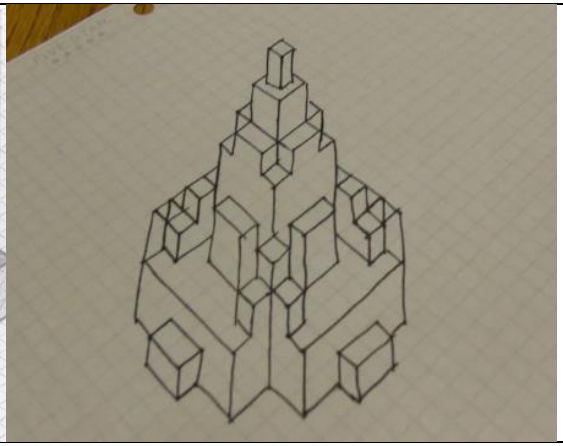
Y6	Electrical systems and control: Fairy ground rides **Make workshop with Steph O'Donnell on Wednesday 8th September** **Microbit programming with MGL**  	Mechanisms: Wooden cam toy  **Key individuals- Mechanical engineer Abbie Hutty** *Use a grid to support 3D drawing skills *CAD This is the same as Y5 due to coming off our cycle system.	Food How can we adapt a recipe? Ingredients? Quantity? Food from distant places. E.g chicken tandoori kabab, spaghetti Bolognese, chicken rice. *Exploded diagrams if applicable

Drawing/diagram examples

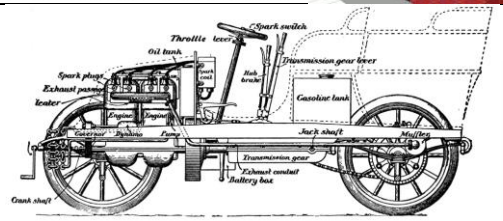
A grid used to support 3D drawing skills.

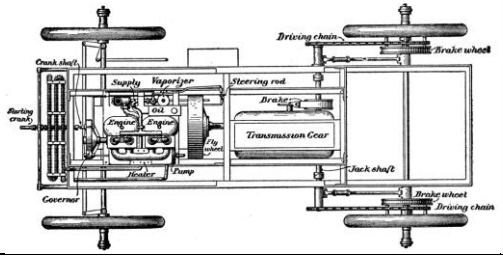


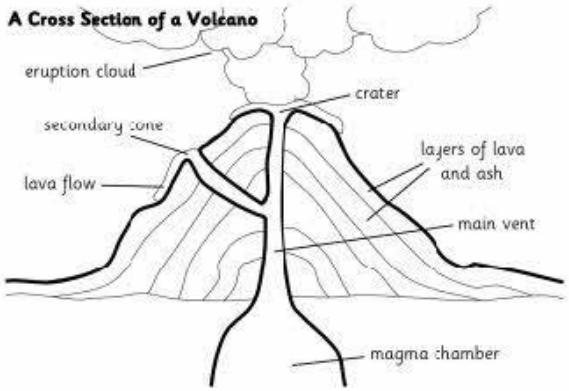


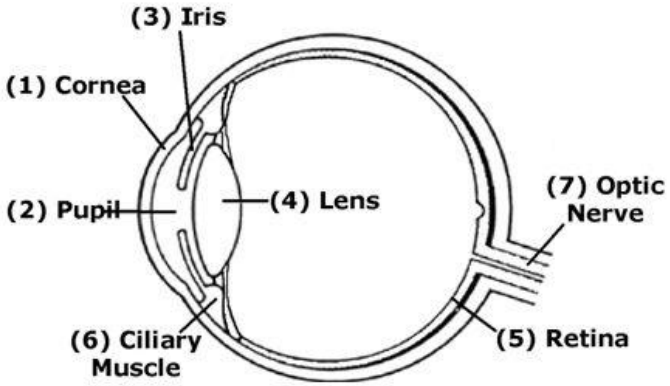


Cross-sectional diagrams

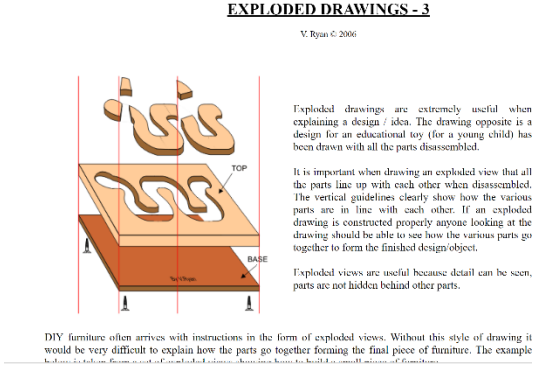








Exploded diagrams



EXPLODED DRAWINGS - 3

V. Ryan © 2006

Exploded drawings are extremely useful when explaining a design / idea. The drawing opposite is a design for an educational toy (for a young child) has been drawn with all the parts disassembled.

It is important when drawing an exploded view that all the parts line up with each other when disassembled. The vertical guidelines clearly show how the various parts are in line with each other. If an exploded drawing is constructed properly anyone looking at the drawing should be able to see how the various parts go together to form the finished design/object.

Exploded views are useful because detail can be seen, parts are not hidden behind other parts.

DIY furniture often arrives with instructions in the form of exploded views. Without this style of drawing it would be very difficult to explain how the parts go together forming the final piece of furniture. The example