KS3 Graphic Knowledge Organiser
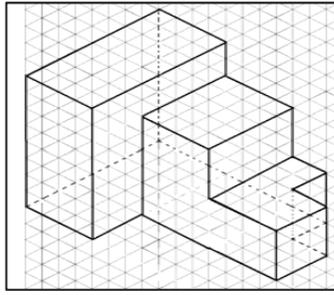
Supports the Rainforest Resident graphics project taught by Mr Hallett and helps students prepare for their end of project test! Good luck everyone ☺

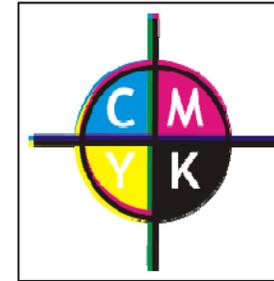|	Definition / Explanation of Topic or Vocabulary
Deforestation	Removing large areas of forest on an industrial scale for mining, transport routes, housing or building manufacturing plants. Often happens in **developing countries** who have limited resources to sell to others countrires
Hunting and Poaching	**Poverty and economic hardship** means that in developing countries, local people often hunt endangered animals for meat or catch them and smuggle them out of the country to sell as pets in Europe.
Slash and Burn Farming	**Economic hardship** means that in developing countries, local people often clear sections of rainforest for farming using fire. The land is only good for 2 years after this method- then the farmers need to move on.
Air Pollution & Global Warming	**Carbon Dioxide** created when fossil fuels are burnt to release energy . **Methane** released from paper in landfill or over farming. They "blanket" the Earth and are the main cause of global warming.
Finite Resources	Natural resources that **can't be regenerated** and will eventually run out or reach a level so low they are no longer an option. Oil based plastic, naturally occurring metals and radioactive elements are all finite.
Trees & Carbon Offset	Trees and plants use **Carbon Dioxide** in Photosynthesis. They trap & hold the carbon and release the oxygen. If companies cause lots of pollution they **offset/correct** this e.g. by buying land & planting trees
FSC managed forest	**Forestry stewards commission.** A group that works with companies to ensure that forests are managed in a sustainable way and new trees are planted to replace those cut down for manufacturing or for fuel.
Biodegradable Materials	Materials that **rot and decompose rapidly** without releasing dangerous gases or leaching toxins into the ground. **Can be composted**. Obvious examples like vegetable peelings, tea bags, egg shells
Cardboard Thickness	The **thickness** of card is referred to as its **weight**. This is measured in **grams per square meter (gsm)**. The heavier the card is the thicker it tends to be.
Isometric Drawing & Crating	A **3d drawing** system that replaces 90 degree horizontal lines with **30 degree lines**. Sometimes known as the **diamond technique**. Complex ideas can be sketched within isometric frames/crates
Orthographic Projections	**A 2D technical drawing technique**. Shows up to 6 views of the same 3d object depending on repetition. Drawn **full size or to scale with dimensions in mm**. 3rd angle projection is most common layout.
Exploded Diagrams	When a **complex product is drawn as individual components**, separated and spaced out along a liner line. Shows construction sequence and **how a product might look if it "exploded" and separated.**
C.A.D/ C.A.M	**Computer aided design** and **computer aided manufacture**. Programs like 2 D designer and Sketch up can be used to design 2d or 3d objects and can send information to a lazer cuter or 3d printer for manufacture
Printing: Registration Marks	Commercial printing is made up of 4 separate colour layers printed one on top of another. If they are not aligned the image looks fuzzy. **Registration marks allow you to check the alignment** of printing.
Barcodes and QR Codes	An optical machine readable symbol for information. A series of vertical lines of different thicknesses combined with numbers. Used for pricing and cashing products at the till as well as stock level tracking by retailers.

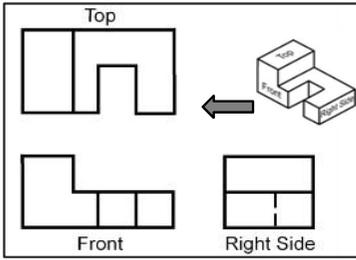**Deforestation**
Clearing or cutting down huge areas of trees

Poaching & Smuggling
Catching exotic animals & sending them abroad as pets.

Global Warming
Air pollution traps heat and raises the earths temperature.
This melts ice caps & changes the weather

Forestry stewards commission.
Make sure new trees are planted when others are cut down.

Trees& Forests
Clean & filter our air trapping carbon releasing oxygen. Also a source of building materials & fuel.
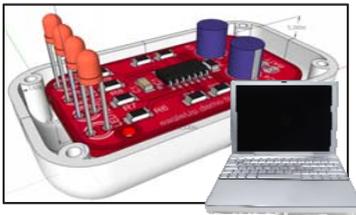
Isometric
A type of 3d drawing using 30 degree diagonal lines.

Orthographic
A type of 2d drawing. 3-6 "sides" of the same object with sizes in mm
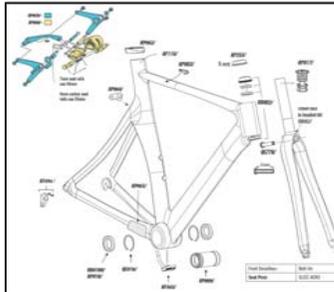
Exploded Diagram
A type of 3d drawing where all of the parts are separated out in a line.

CAD
Computer Aided Design. Using software to draw an idea in 3d.
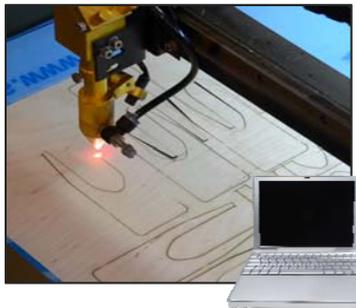
CAM
Computer Aided Manufacture. Sending a CAD design to a lazer cutter or 3d printer so I can be "made"

Registration
Marks that allow us to check print colours are aligned accurately

Barcodes
Contain product price for checkout and allows shop to keep track of stock.

QR codes
Quick response code. Contains 25 times as much info as a bar code. Scanned with a smart phone.

Easy access content

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