Design Year 9 CET Assessment Revision

This document contains the key information that you will need for your Creative Education Trust Assessment.

Some strategies to help maximise how you use this pack:

- Copy out information to help you learn.
- Test yourself on information (Look-Cover-Test-Check).
- Read through the pack silently to deepen your understanding.

Some additional tasks that could help you:

- Listen to a wide range of music from various genres.
- Do things that take you out of your comfort zone. (Answer questions in class, offer to read out, take part in PA club).
- https://www.bbc.co.uk/bitesize/guides/zhdpvj6/revision/1 have a look at this revision link
- https://www.bbc.co.uk/bitesize/guides/zjgyb82/revision/2

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Packaging

You must know the four main functions of packaging (What is it used for?)

TO PRESERVE
- Foods are packaged to prevent them from going rotten.
- It also keeps them hygienic and allows them to be bought conveniently.

TO PROTECT
- The packaging protects the contents, allowing the contents to arrive at the shop or at home undamaged.

TO INFORM
- Labels provide information about the product to the customer or shop.
- They can be used as a marketing tool.
- They can make claims to a customer.
- They can carry information for shops in barcodes.

TO TRANSPORT
- Items are packed into boxes or trays called 'Outers' so that they can be moved, and stacked easily.
- Packaging usually tessellates to allow more to be transported in a smaller lorry, reducing costs.

Types Of Packaging

Paper

Metal

Board

Plastic

Glass

MATERIALS: Paper & Boards

Paper & board is made from wood pulp (trees) and waste paper (recycling). This pulp is grey/brown in colour.

The pulp must be bleached to make it white (just like when you bleach your hair!

Bleaching makes the paper/card more expensive to make, but if you are printing onto the paper/board, it must be white to avoid discolouration and poor printing quality

Paper

Paper is mainly used for paper bags and labels

Its WEIGHT is measured in GSM (Grams per Square Metre)

Chocolate Wrappers
Canned Food Labels
Sugar & Flour Bags
Stationary (Party Invites)

DUPLEX BOARD

This is a unbleached (non whitened) wood pulp board, with a bleached (white) liner.

The bleached liner gives a good surface to print onto, without the high cost of the whole board being bleached.

Great for high speed printing and automatically packed boxes.

Applications: Food and pharmaceutical packaging. Swing tag labels (for your activity pack).

SOLID WHITE BOARD

board is totally bleached (whitened).

It is expensive because of the additional cost of bleaching the wood pulp.

It is very strong, and give an excellent surface to print onto.

ackaging, Perfume Boxes

FOIL LINED BOARD

This is one of the previous boards, with a laminated foil surface.

This helps to make the foil waterproof, and retain the heat of a meal contained inside it.

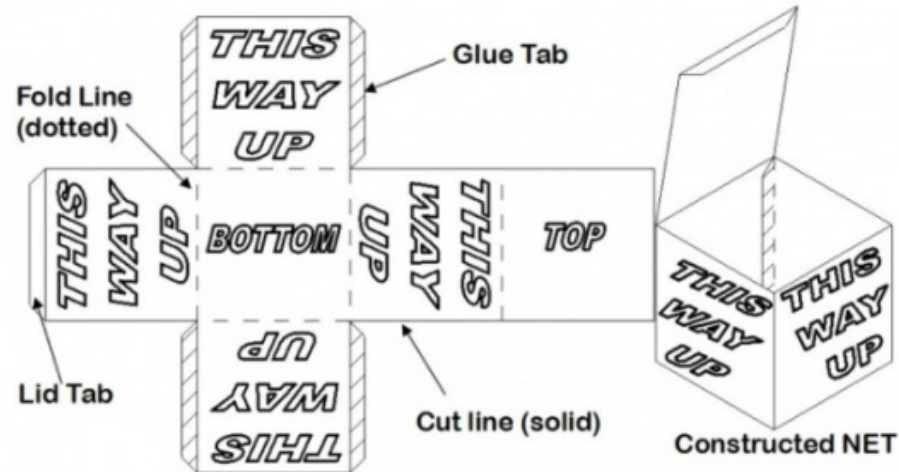Applications: Tetra Paks, drinks cartons, ready meal lids

PACKAGING NETS

- A NET is a two-dimensional (2-D) shape, which when scored, folded and glued together, makes a three-dimensional (3-D) package, box or carton.

- It must be made ACURATELY so that all sides fit together perfectly.

- The design must be printed the correct way up so that when the box is constructed, everything is the right way up.

- A standard set of line types are used to draw NETS.

Glue Tab

Fold Line (dotted)

THIS WAY UP

THIS WAY UP

BOTTOM

THIS WAY UP

THIS WAY UP

TOP

THIS WAY UP

Lid Tab

Cut line (solid)

THIS WAY UP

THIS WAY UP

Constructed NET

Parts of a Packaging

Name the following parts of packaging. What is the function of each?

1. Handle
2. tab
3. perforation
4. Euro hook
5. dust flap
6. Shrink wrap
7. Locking tab
8. Glue tab
9. window
10. Fold line
11. Tamper evident seal
12. Envelope close base
13. Crash bottom
14. Laminated carton
15. Blister pack

Plastics Packaging

PVC
Poly Vinyl Chloride
Blister Packaging & Inner Trays

HDPE
High Density Polythene
Juice & Shampoo Bottles
Detergent bottles
Milk Cartons
Bottle lids

LDPE
Low Density Polythene
Carrier Bags
Squeezy Bottles

PS
Polystyrene
Expanded PS: Egg & takeaway cartons, protective packaging
Yoghurt Pots & Food Trays

PP
Polypropylene
Sauce squeezy
Packaging: activity pack cases
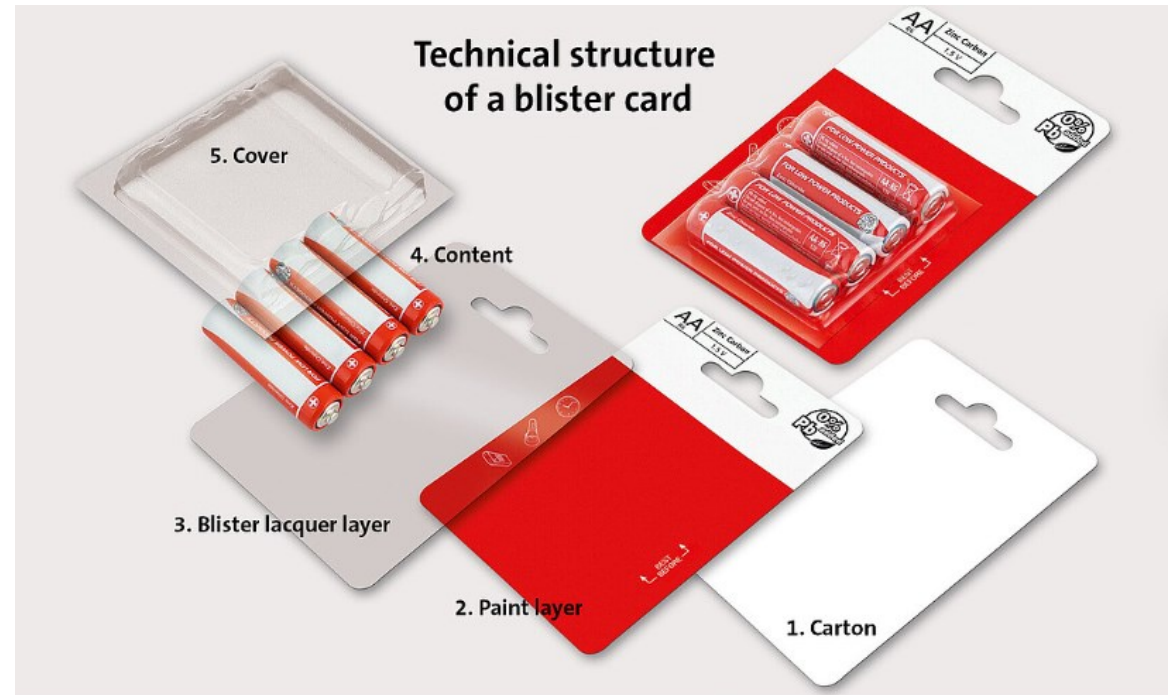Biscuit & crisp packets

PET
Polyester
(Polyethylene Terephthalate)
Oven ready meal roasting bags
Fizzy drink bottles

Technical structure of a blister card

5. Cover
4. Content
3. Blister lacquer layer
2. Paint layer
1. Carton

https://www.youtube.com/watch?app=desktop&v=Oj9nQiM2vqA
https://www.youtube.com/watch?v=1unuc9qj2-A

Acrylic	Technology concerned with the design, building, and use of engines, machines, and structures.
Bitmap	Techsoft 2D Design has many f_____.
CAD	Products of the graphic arts, especially commercial design or illustration.
CAM	Light amplification by stimulated emission of radiation acronym.
Card	Give an authoritative instruction to do something.
Clipart	Manufactured board often used in school laser cutters.
Conversion	The company that makes the 2D Design program.
Drawing	Writing, words.
Engineering	The two main types of images are v_____ and bitmap.
Features	Common plastic used in laser cutters.
Graphics	The two main types of images are vector and b_____.
Laser cut	Computer Aided Design
Page Size	Computer Aided Manufacture
Plywood	Laser cutters can cut paper, c_____, plastic, wood etc.
Techsoft	Simple pictures and symbols made available for computer users.
Text	Changing or causing something to change from one form to another.
Vector	A picture or diagram usually created by hand.