

Plan, Design & Create Your Own Board Game

In this assignment you will be analysing existing board games at home, finding out what people like about them, then transferring the knowledge into a new board game.

When you have drawn and made your game out of card or other materials at home, please take a picture and send it to me, hchampaneria@park-aspirations.org

Tasks

1. Learn about the different types of paper and board and their uses.
2. Create a strategy for your board game.
3. Analyse existing games to consider the good points and bad points.
4. Design the packaging for the board game
5. Design the layout of the board and game pieces
6. Make a prototype of the board game
7. Identify production methods which could be used to make the game board.
8. Record of making the game.
9. Gain feedback from your family.

Thinking about what you need to achieve.

A design specification describes your intention for the product once it is made. Below are a list of initial points required to be met by the product.

The board should be

- able to be made in large quantities.
- able to easily be transported in a school bag.
- made out of recyclable materials.
- appeal to young children between the ages of 10-14.
- should make a profit when sold which is 3 times the manufacturing costs.
- should be bright, colourful and have a theme.
- must teach children about design and technology facts in a fun way
- should have areas to hold the game pieces and cards

Task 1:

- a. Create a mind map showing how you think you can meet the requirements of the specification above.
- b. List the key words in each line of the specification and what you need to investigate to clarify the point.

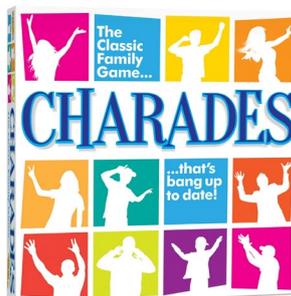
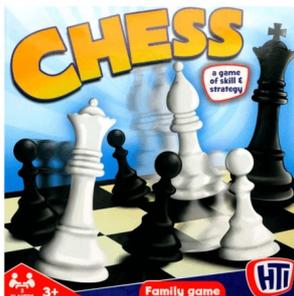
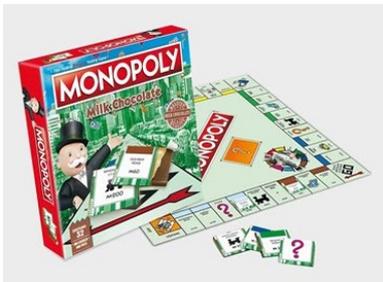
Analysing products for inspiration

When designing a new product there will probably already be existing products that meet the needs in a similar way. You can use these products as a source of information to help you design a product. Product analysis involves investigating existing products and understanding about why they are designed in a certain way. By identifying good features in a product, you might be able to use them in your design and improve poorly designed features.

Task 2:

Ideally you should look at three existing products and play the games to fully understand them, however we know that may not be possible. For three board games, find out as much of the information below as you can:

- Cost: How much it costs and is it good value for money?
- Aesthetics: Is it attractive, what features does it have, and what key information is on it?
- Function: What is the purpose of the game and how are the contents arranged.
- Ergonomics: What shape is it and how has the user been considered?
- Quality: How is the product finished and does it have a quality feel to it?
- User: Who is it for and is it appropriate?
- Environment: How has the environment been considered and what is the overall effect on the environment in manufacture and disposal?
- Materials: What materials have been used to make the product?
- Manufacture: What manufacturing methods have been used to make the pieces and board?



Understanding the client

Having a discussion with a client (someone at home) can be an important part of meeting their needs, by better understanding the client you will be able to build a rapport and allow the client an opportunity to explain their requirements. Open ended questions starting with what, tell me and why will allow them to fully explain themselves.

Task 3:

Write a list of six to eight questions you would like to know about your client and their requirements, by the end you should know all about the lifestyle they lead and what they want to achieve.

Task 4:

Ask your client the questions and carry out the interview, record the answers and then write a summary about your interview. What have you learnt and what can help you with your design intentions.

Understanding the user

Understanding the user can help you to better identify what they require from the product you are designing, by creating a snapshot of their lifestyle it can help focus on what they value and in turn you can reflect on this when you are designing.

Task 5:

- a. Create a lifestyle board for your intended user, use the questions below to help define who they are.
- b. Summarise what you have found out about the user.

Thinking about design possibilities.

Task 6:

Think of three games you could design and make to meet the specification. For each game consider the following:

- Name of the game
- What the strategy of the game would be
- Theme imagery you would use.

Pitch your ideas to two friends and explain which one you are going to design and why, did you gain any ideas from other people or have second thoughts? Summarise what you found out.

Developing your chosen design idea

Task 7:

- a. What is the strategy used to play the game? Decide if the board game will have a card based or dice based strategy to move you around the board or you could combine both.
- b. What theme will you adopt and what characters will you have in the game?
- c. How will the players progress around or up, down or across the board?
- d. How many players will there be?
- e. How do players win the game?
- f. Will there be selections to alter the course of the game or award prizes?
- g. How will the game be played?

Developing the board idea.

Task 8:

Sketch out what the board would look like and label the key elements of the game offering a small explanation for each.

Show this to your client and explain the idea, below record any questions your client had and how this might need to be addressed.

Developing the content in the game.

Task 9:

Design the cards which will have information on them about design and technology related content. Produce several ideas for the card face. Think about the theme which will be on the face of the card and how the information will be presented on the other side Sketch out what the board would look like and label the key elements of the game offering a small explanation for each.

Developing the characters in the game.

Task 10:

What will the player pieces look like? Design the player pieces in the space below.

Writing the rules of the game.

Task 11:

What are the rules for the game and how will a player win?

Developing the content

Task 12:

Write out the questions for the game and the answers, you may use a text book or the internet to generate the questions relating to design and technology. The game should contain at least 20 questions, it would be a good idea to work together on this task and share information and questions.

Making your Product

Task 13:

Now using appropriate materials make your prototype. Use the information on the following pages to help you.

As you make your product, take photos or draw images of key stages in making your game and describe what you're doing.

Graphic product information.

- Paper sizes are A1,A2,A3,A4,A5,A6.
- Paper is measured in grams per square meter.
- A safety rule is used with a craft knife or scalpel on a cutting mat to cut and fold cardboard.
- A rotary paper trimmer is used to cut paper and thin boards.
- Any paper which is over 200gsm is classified as board and thicker board in microns.
- Bleed proof paper is used for high quality presentations using water based paints.
- Cardboard is used for packaging ,boxes and cartons.
- Die cutting is a method used to cut and crease boards when making products in quantity.
- Joining paper together can be achieved with paper clips, staples, slide bonding treasury tags or a paper fastener.
- Grid paper is paper that has a square grid on it to help present drawings such as planometric drawings and working drawings.
- Isometric paper is paper with lines drawn on it at 30/60 degrees and it used to draw ideas in 3D.
- Tracing paper is a clear paper used to trace and copy images.
- Typography is the method of presenting letters in different styles to make the words look visually appealing and clearly convey a message.
- Pencil leads have different levels of softness these are 2B and HB for shading and 2H for drawing construction lines
- A fine line pen can be used for outlining a drawing to make it stand out or to enhance lettering.
- Set squares are called this because they have set angles on them at either 45 ,30 or 60 degrees.
- Ways of binding paper include coil binding, spiral binding, comb binding and wire binding.
- Types of glue used to join paper and card are PVA, glue stick ,aerosol adhesive or a glue gun.
- To protect a printed surface you could spray a fine layer of varnish onto the paper or if it is a small card item you could laminate the card between layers of plastic.
- When drawing using tone creates a 3D effect on the object.
- The primary colours are red ,yellow and blue.
- Colour fusion is when one colour blends into another for example blue into green.
- When drawing large objects on a piece of A4 paper, designers will often use scale to represent the object , a scale value of 2:1 means the drawing is twice the size of the object.
- Methods of printing in quantity include lithography, laser and inkjet printing methods.
- Recycled paper uses between 40-70 % less energy to produce paper.
- If paper is put in landfill sites it gives off methane, a greenhouse gas.
- Carton board is a waxed board often used to keep food in containers.
- A Euroslot is the slot die cut into packaging to allow it to hang on the shelf.
- Two main colours used in the printing industry are RGB(Red, Green, Blue) and CMYK (Cyan,Magenta,Yellow and Key(black))
- UV(Ultraviolet) varnishing allows products to be spot varnished, which when passed through an ultraviolet light will cure and set.
- Corrugated cardboard is used for the packaging of objects as it is lightweight, cushions and insulates the product inside.
- Foil lined board is used in the food industry to keep food warm as it reflects the heat back into the food.
- Foam board is used to make models of ideas. It is lightweight, has a smooth front and foam inside.

Testing the game

Task 14:

Write five questions you would like to use to ask people about their experience playing the game. Capture the results using a pictogram for each question. Think about the following when capturing your information but this is not mandatory.

Aesthetics-colour, shape, size and style

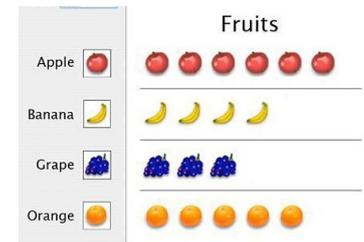
Function – Is the game content clear

Cost -How much would someone pay for it?

Safety- Do they think it is safe for small children

Opportunity- What would they change?

Strengths -What do they like?



Evaluating your Product

Task 15:

Write a brief evaluation of your product. Consider the points below:

How successful was your product?

Did it meet the demands of the specification? If not, what would you change?

What changes would you make to your game going forward?

