

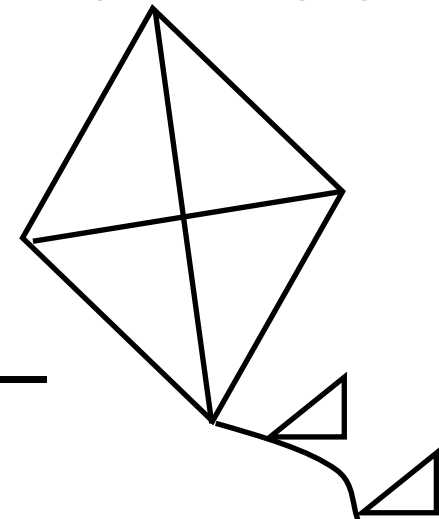
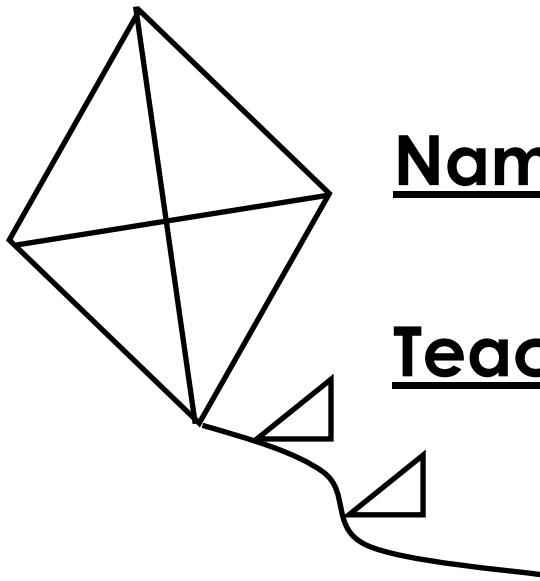
KS3

Design and Technology Rotation Booklet

Kites

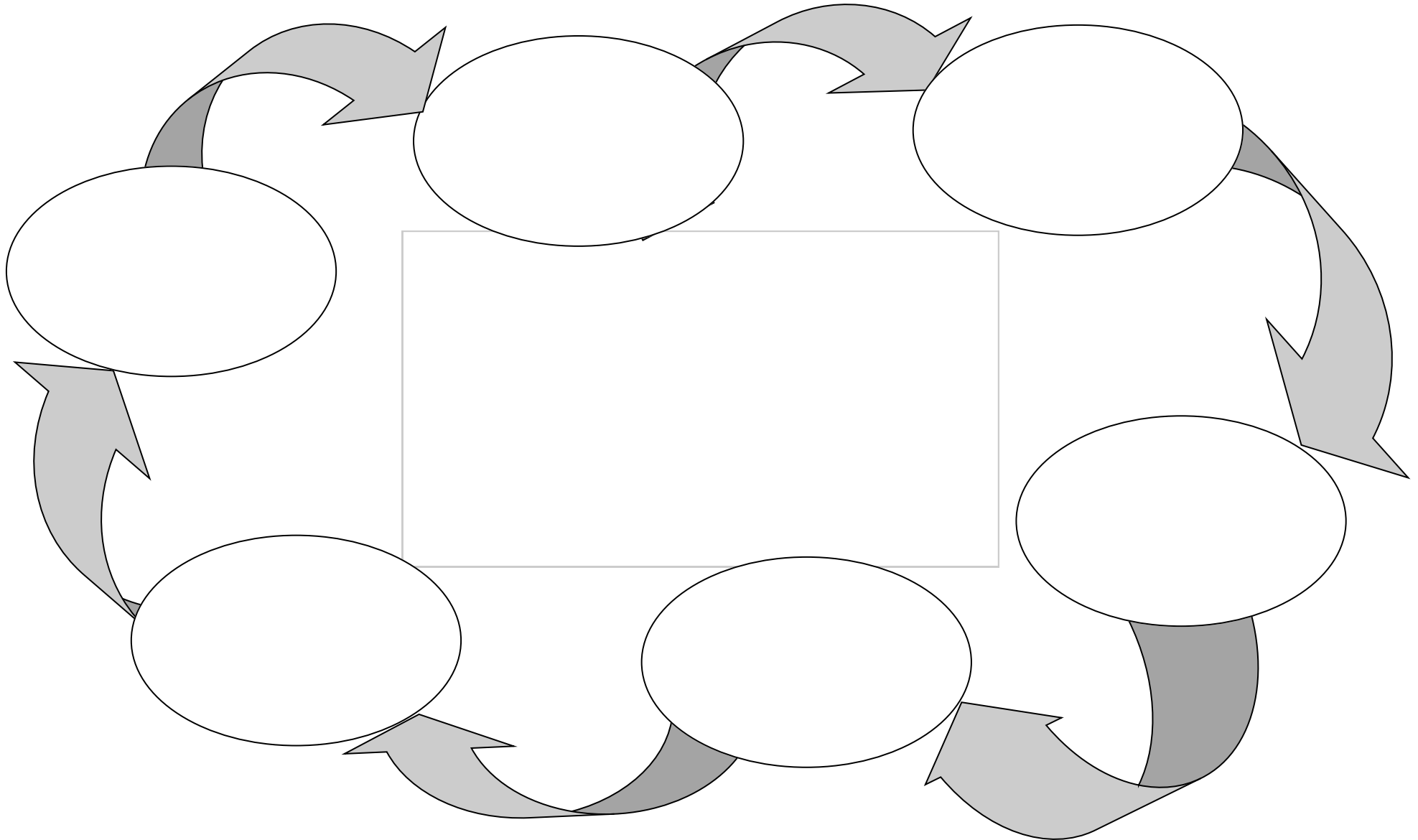
Name: _____

Teacher: _____



The Design and Technology Department

Complete the flow diagram below with the order of subject rotation you will follow, the rooms you will be in and the teachers that will be teaching you.



Expectations and rules in Design and Technology

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

I agree to abide by these rules _____

Kite Project

Design Brief

A local company 'FANTASTIC KITES' is expanding its range of designs to celebrate Countries of the World. You are going to work as a kite designer and draw up a range of designs which you will then evaluate and develop. You are going to be researching, designing, planning, making and evaluating a kite based on theme of a country. You will be drawing designs based on research and you will use different materials to make your kite. You will make your kite and test it to see if it flies.

Design Criteria

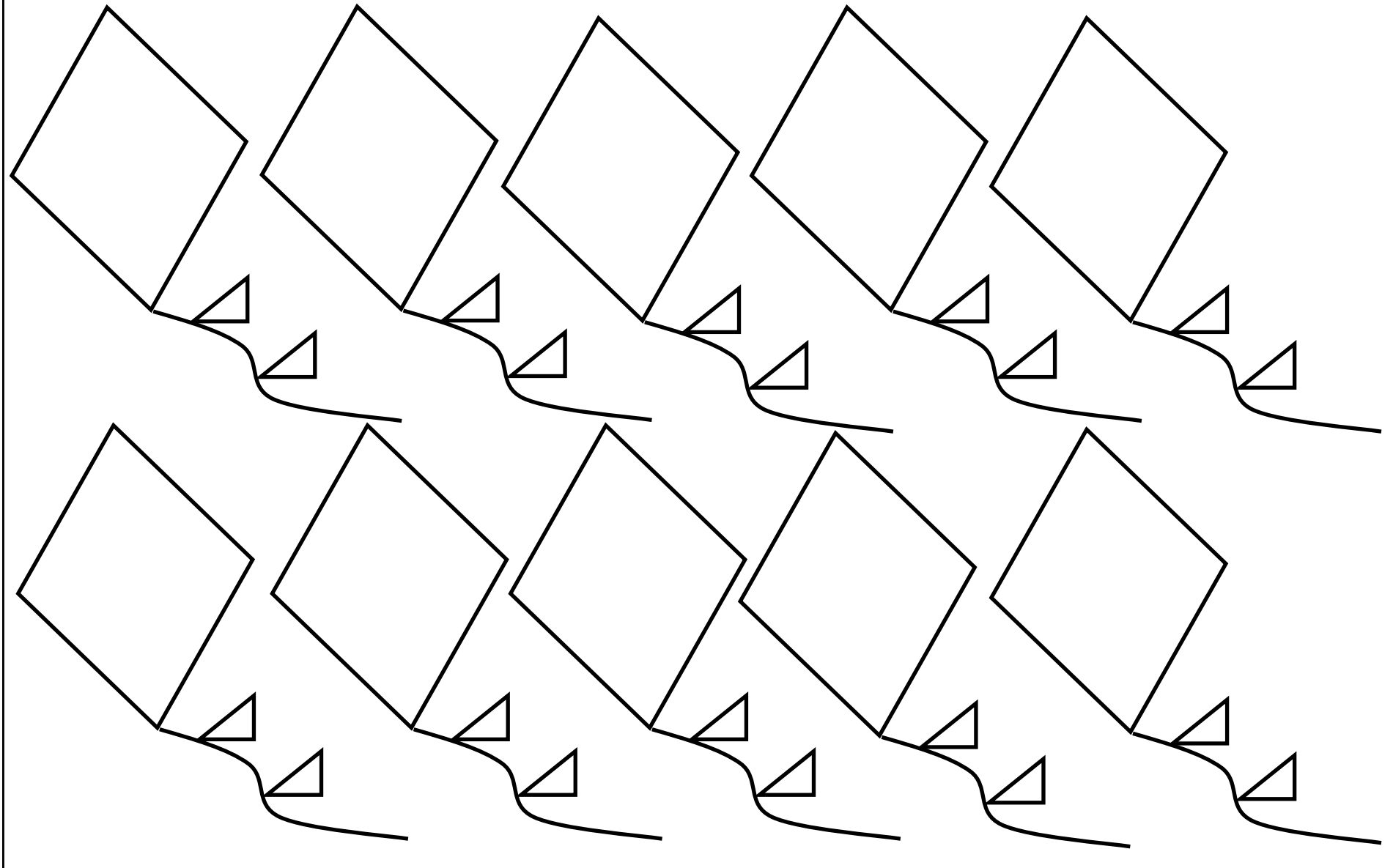
When a client wants a product designed then they will give the designer a DESIGN CRITERIA to make sure that they design exactly what they want. Fantastic Kites are your clients and have set you a design criteria which your designs must fulfil to be successful. Make sure you refer back to these when drawing out your ideas.

Your kite must be:

- Based on the theme of a country.
- Colourful
- Have a clear design and link to the theme.
- Measured no more than 30cm x 60cm
- Neat
- Easily seen from a distance.

Kite Project - Key Words

What do you think the key words are from the Design Brief? Write these words inside the kites below!

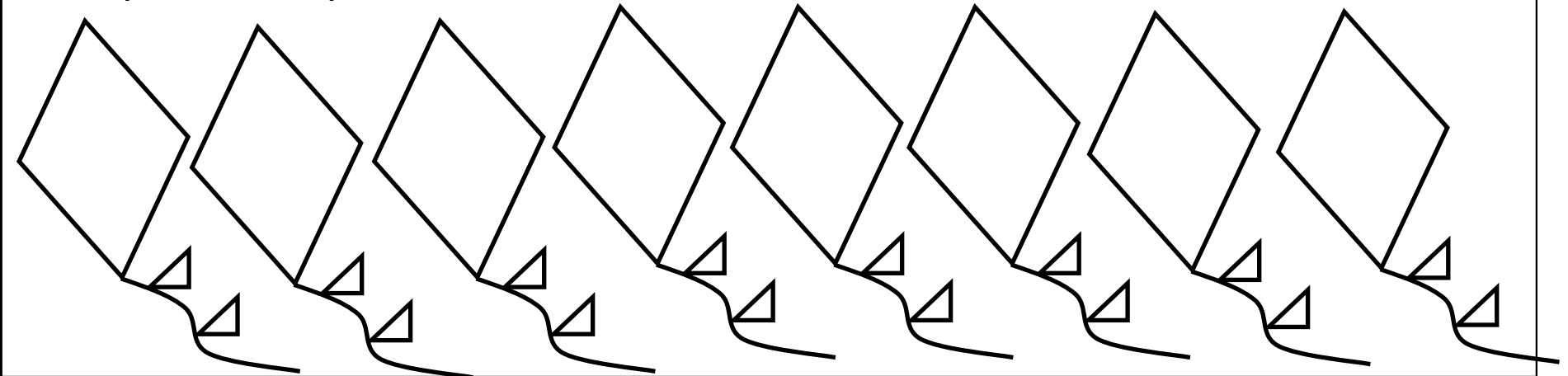


Kite Project

Project Outline

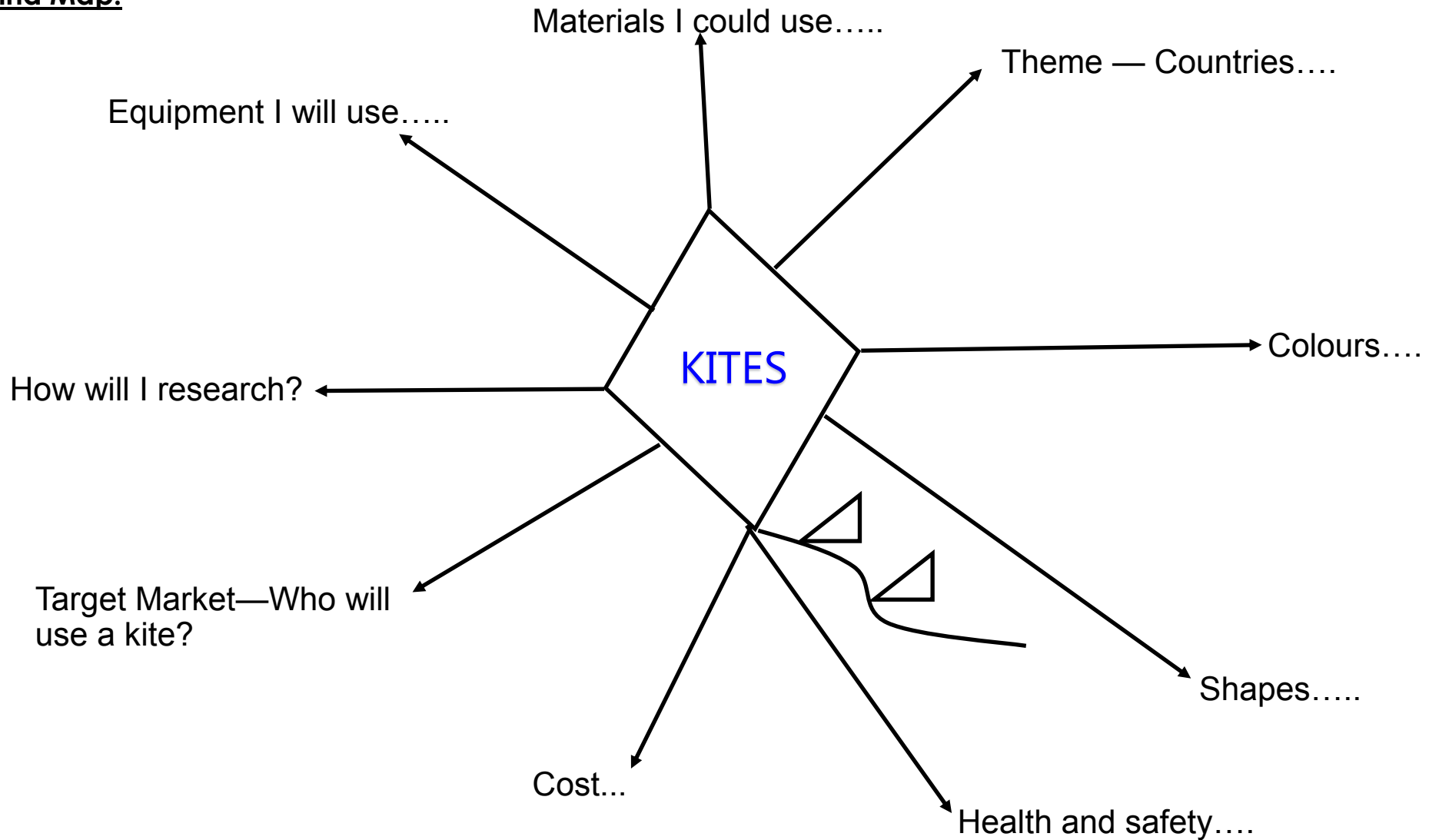
- ◇ You will begin by researching the design brief and the given theme.
- ◇ You will use your research to inspire your own designs.
- ◇ You will then make your kite and this will then be properly tested outside so that you can write a detailed and accurate evaluation of your kite.
- ◇ The main sections of your project will be levelled against an assessment criteria which you will be given as you complete sections of work.
- ◇
- ◇ You will also be self and peer assessing your work. You will have 10 weeks complete this project so it is essential that you make the most of all class time and complete all homework set.
- ◇ This project has been designed for us to accurately assess the level that you are working at so it is important that you try hard to show your full range of abilities.

What do you think the key word are from the information above? Write these words inside the kites below!



Kite Project. Responding Creatively to a Brief—You should write on your mind map as many ideas as you can think of to do with the project. Remember to be creative. Use colour and images to make your mind map more creative. Add as much detail as possible!

Mind Map:



Level 4: A mind map is completed in detail and the project is considered in its presentation.

Level 5: Mind map is very detailed and presented creatively reflecting the project.



Kite Project. Responding Creatively to a Brief—You should write on your mind map as many ideas as you can think of to do with the project. Remember to be creative. Use colour and images to make your mind map more creative. Add as much detail as possible!

Mind Map:

Level 4: A mind map is completed in detail and the project is considered in its presentation.
Level 5: Mind map is very detailed and presented creatively reflecting the project.

AFL

Kite Project.

Existing Product Research

Choose at least 3 different kite images, cut them out and stick them on the page. You should then label the image with the features that stand out. Comment on colour/shape/theme and any other interesting points about the kite.



Kite Project - Research

What is a Kite?

A kite is defined as a light frame covered with paper, cloth or plastic often provided with a stabilizing tail, and designed to be flown in the air at the end of a long string.

Flight...

A kite is heavier than air with wing surfaces that react against the air to create lift and drag— also known as flight!

Kite History

The kite was invented in China in the 5th Century BC by 2 Chinese Philosophers About 2,800 Years ago.

The shape of a kite

A kite is traditionally a flat shape with 4 straight sides. It has two pairs of sides. Each pair is made up of two adjacent sides that are equal in length. Also.. The angles are equal where the pairs meet!

Purpose...

Kites were used for:

- Signalling
- Testing the wind
- Measuring distances
- Lifting men
- Military communication.

Kite Project

Design Theme Research - Flags of the World

How many different flags can you identify? A flag is part of the identity of a country and the colours of the flag are often used as inspiration for anything linked to that country for example sports teams and souvenirs.



What colours do you think of when you think of Great Britain?

Your Task...

Choose 6 flag designs that you like and draw them in the boxes using the correct colours....

Make sure you colour them neatly
And label each one with the country it represents.

Kite Project

Research Design Theme - Countries of the World

Look at the different moodboards based on different countries.

Choose a country that you would like to use as a theme for your kite design. Starting with the flag for that country can you create a moodboard for your chosen country

What is a
Moodboard?

Why do we use a
Moodboard for ?

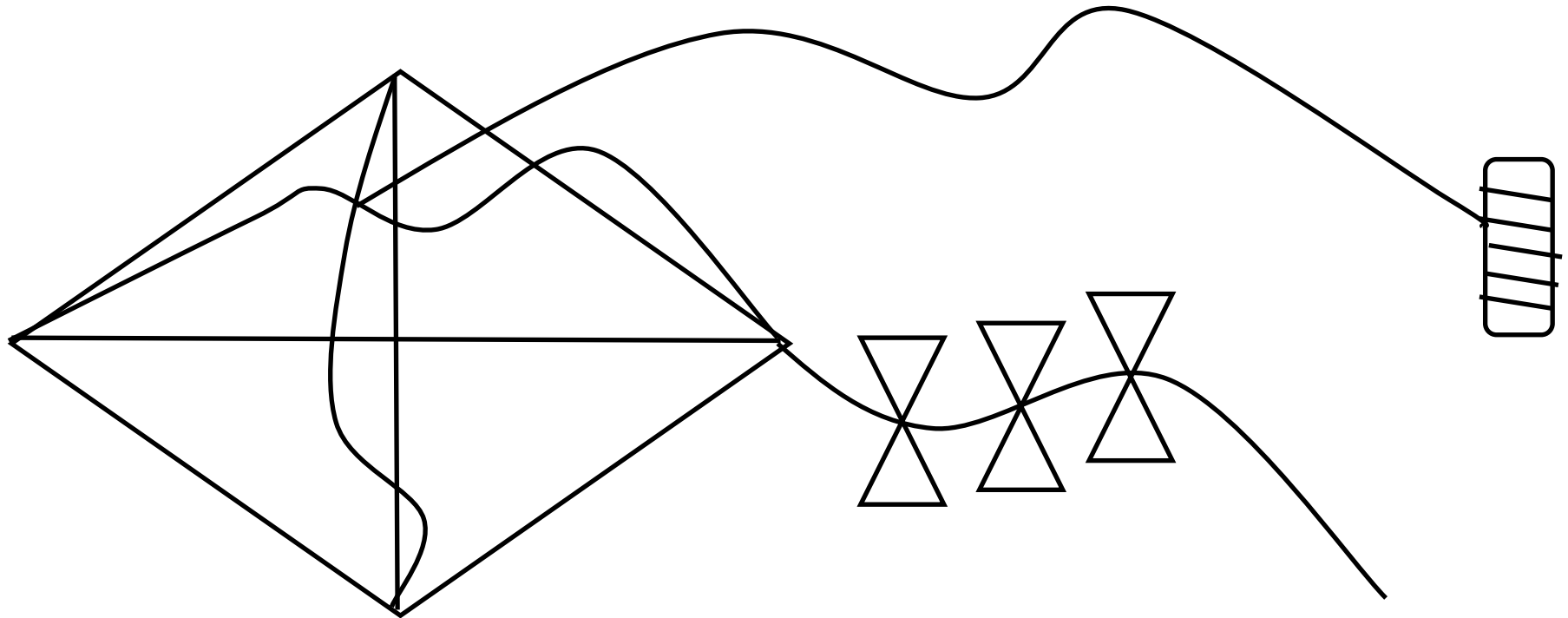
Research used:



Kite Project

Research and Planning—The Structure of a Kite

Kites are made up of different parts in order for it to be able to fly! Can you label the different parts of the kite?



Kite Project

Design Ideas based on Research

How have you used moodboards to design a creative design?
In the space below draw 2 different design ideas based on your research.

Design 1

Design 2

Level 4: Designs are original. These are drawn, coloured and labelled showing any problems.

Level 5: Designs are original and creative. They are well presented demonstrating a good use of colour and sizes are shown.

Now you have drawn some development ideas you are ready to draw your final idea. This should be drawn neatly, coloured, and labelled. You should be able to explain where you have got your inspiration from.

Final Design

I have chosen this as my final idea because..... (Give 3 reasons why you have chosen this as your final idea)

1. _____

2. _____

3. _____

Kite Project

Planning

To be successful my kite design must be:

Materials

Step by step plan of how I will make my Kite

Tools

Techniques:



Descriptor

Level 4


Level 5

Plan, organise and make.

You have produced a step-by-step plan on how to make your kite that lists tools, materials and equipment needed.

You use your plan to help you make your kite book and suggest alternative designs. You make notes on any changes you make.

Photograph of product:



Self Assessment

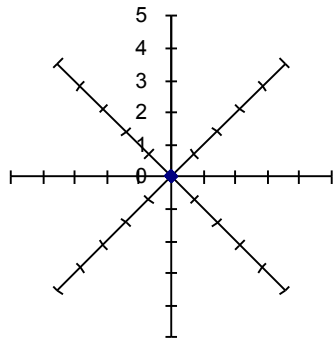
Skill	How I think I did

Level 4: You have worked with the materials and used the correct tools with some accuracy. You have completed a well finished product.

Level 5: You can explain why you have selected certain materials and how they are suitable for your product. You know how to use the correct equipment and can use them with accuracy.

<p>What I did. Include techniques, materials, equipment.</p>	<p>Problems I had. Explain how you overcame any. Did you have help?</p>	<p>What I will improve for next time?</p>

Evaluation of my kite



Level 4: You identify what is working well and what could be improved to overcome technical problems. You reflect on your designs as they develop, recognising the significance of knowledge and previous experience.

Level 5: You check your work as it develops, solve technical problems and show some evidence of creativity as you modify your approach in the light of progress. You test and evaluate your products, showing that you understand the situations in which the products will function.

Kite Project Assessment Results

	Level achieved	How I can improve my work	Date
Respond creatively to briefs— mind maps.			
Generate, develop, model and communicate ideas. Use understanding of other's designing—design development			
Plan, organise and make.			
Reflect on their own designing. Evaluation			

In order to see how well you have done and how you could make improvements, you should always **EVALUATE** your work, by looking back or reviewing what you have done. Answer the following questions to help you **EVALUATE** your Apron project

List the materials and equipment you used for your project and say what you used them for:

Material/Equipment I used.....	What I used it for?
EG. Thread	To sew my apron together and to sew my initials on the apron using the CAD/CAM machine.

State 2 things that went well with your project and explain why.

State 2 things that you could do to improve your project.

What ideas did you use from your research for your designs/models? What other types of research could you do?



Level 4: You have explained what is working well and what could be improved to overcome technical problems. You have reflected on your designs as they develop, and shown how you have learnt how to add them into your product. You reflect on your designs as they develop recognising the significance of research, knowledge and previous experience

Level 5: You have checked your work as it develops, solved technical problems and show some evidence of creativity in the making of your apron by using the techniques shown. You test and evaluate your product especially focusing on the fit and finish of the product. You take into account the view of the user.

Textile Technology—Apron Project Assessment Results

	Level achieved	How I can improve my work	Date
Respond creatively to briefs— mind map and initial ideas.			
Reflect on their own Designing—making diary and evaluation.			

Teacher comments on overall achievement.

Commendations awarded?

Pupil working on target?

Pupil working below target?

Pupil working above target?

Baseline Test Assessment Criteria

	Level 4	Level 5	Level 6
Respond creatively to briefs—mind maps.	A mind map is completed in detail and the project is considered in its presentation. Initial designs are original. These are drawn, coloured and labelled showing any problems.	Mind map is very detailed and presented creatively reflecting the project. Designs are original and creative. They are well presented demonstrating a good use of colour and sizes are shown.	Mind map is very well presented and all areas of the brief are explored thoroughly. Designs are original, creative and clearly represent the brief. Drawings are clear, well labelled and thoughts on how the product would be made are shown. The design has been modelled.
Generate, develop, model and communicate ideas. Use understanding of other's designing—design development	You have drawn and modelled your designs simply. Ideas are labelled and you demonstrate that you have thought about any problems that you might have when making. You ask others for their opinions and use these to improve your design.	You can draw, model and discuss your ideas in detail. You answer questions about size and how much your product might cost. Other designs have been researched to inspire designs.	You have researched many different sources to gain inspiration and this is referenced in your designs. Your designs are modelled and the function of the product is explained and how the design reflects this.
Plan, organise and make.	You have produced a step-by-step plan and have selected and work with a range of tools and equipment.	You have worked from your own detailed plans, modifying them where appropriate.	Your plans are detailed and show that you have considered the end use and reflected on previous designs. You use these plans when making.
Reflect on their own designing.	You have identified what is working well and what could be improved to overcome technical problems. You have reflected on your designs as they develop, recognising the significance of knowledge and previous experience.	You check your work as it develops, solve technical problems and show some evidence of creativity as you modify your approach in the light of progress. You test and evaluate your products, showing that you understand the situations in which the products will function.	You evaluate your research and refer to it in your designing. Your product is evaluated throughout the process of making and improvements are made and recorded.

Food Technology—Licence to Cook Assessment Results

	Level achieved	How I can improve my work	Date
Plan, organise and make.			
Apply knowledge and understanding of materials and techniques. Solve technical problems.			

Teacher comments on overall achievement.

Commendations awarded?

Pupil working on target?

Pupil working below target?

Pupil working above target?

Mind Map:



Level 4: A mind map is completed in detail and the project is considered in its presentation.

Level 5: A mind map is completed in detail and presented creatively.

Design based on moodboards:

What shapes, patterns and colours have you used from a moodboard in your design?

Level 4: Designs are original. These are drawn, coloured and labelled showing any problems.

Level 5: Designs are original and creative. They are well presented demonstrating a good use of colour and sizes are shown.

Plan of playground

Level 4: You have drawn and modelled your designs simply. Ideas are labelled and you demonstrate that you have thought about any problems that you might have when making. You ask others for their opinions and use these to improve your design.

Level 5: You can draw, model and discuss your ideas in detail. You answer questions about size and how much your product might cost. Other designs have been researched to inspire designs.

Collage of playground equipment



What research have you used to influence you design?

-
-
-
-

Peer assessment:



Photographs of model

Level 4: You have drawn and modelled your designs simply. Ideas are labelled and you demonstrate that you have thought about any problems that you might have when making. You ask others for their opinions and use these to improve your design.

Level 5: You can draw, model and discuss your ideas in detail. You answer questions about size and how much your product might cost. Other designs have been researched to inspire designs.

Design Module—Playground Project Assessment Results

	Level achieved	How I can improve my work	Date
Respond creatively to briefs.			
Generate, develop, model and communicate ideas. Use understanding of other's designing.			

Teacher comments on overall achievement.

Commendations awarded?

Pupil working on target?

Pupil working below target?

Pupil working above target?

Research used:



Descriptor

Level 4

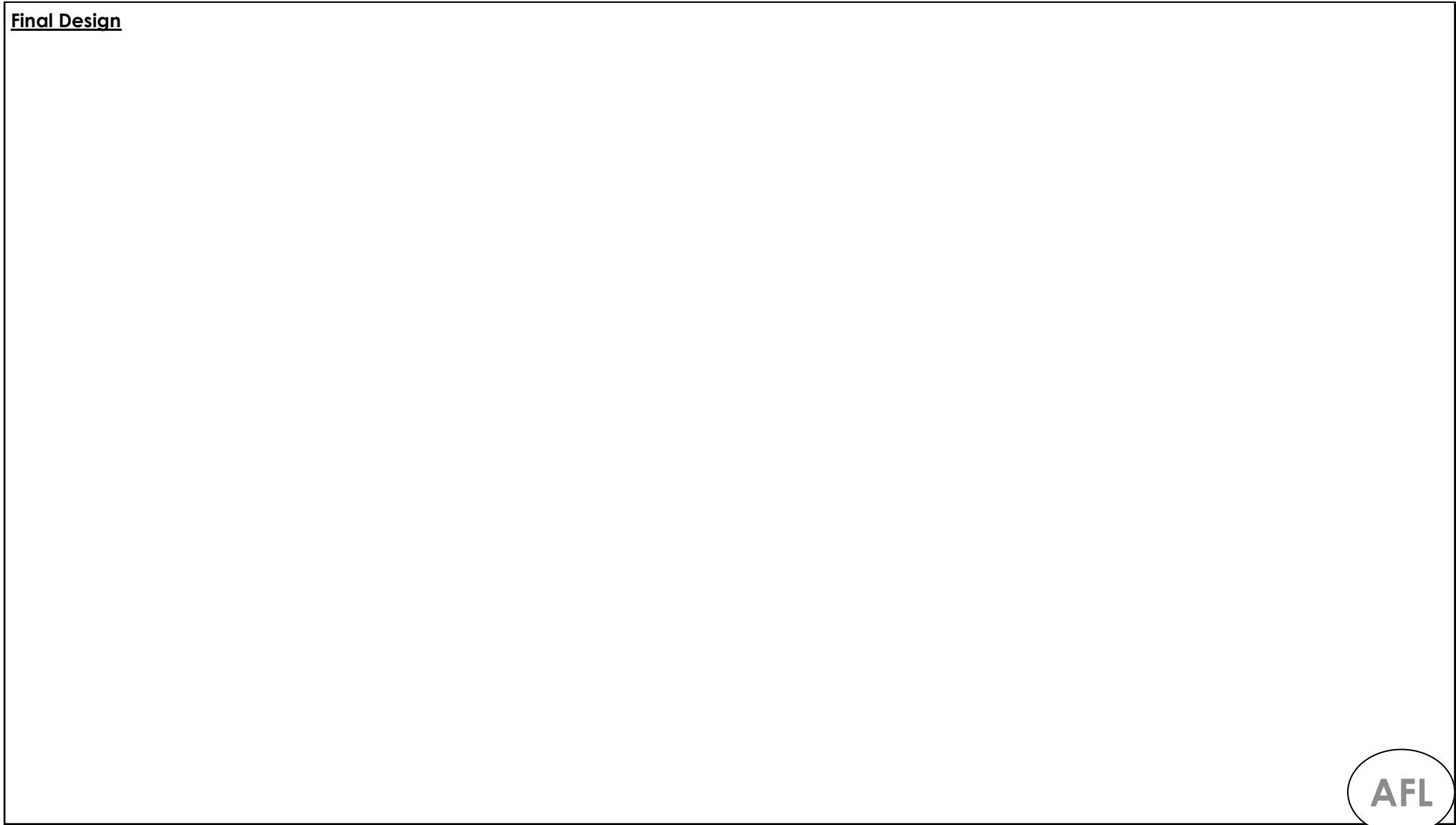
Level 5

Generate, develop, model and communicate ideas. Use understanding of other's designing.

You have drawn and modelled your pop up design designs simply. Ideas are labelled and you demonstrate that you have thought about suitable materials for making. You ask others for their opinions and use these to improve your design.

You can draw, model and discuss your ideas in detail. You show the size of your product and explain approximately how much it will cost to make. Other designs have been researched to inspire your design and these are commented on in your annotation.

Final Design



Descriptor

Level 4

Level 5

Generate, develop, model and communicate ideas. Use understanding of other's designing.

You have drawn and modelled your pop up design designs simply. Ideas are labelled and you demonstrate that you have thought about suitable materials for making. You ask others for their opinions and use these to improve your design.

You can draw, model and discuss your ideas in detail. You show the size of your product and explain approximately how much it will cost to make. Other designs have been researched to inspire your design and these are commented on in your annotation.



Graphic Design

Planning

To be successful my chocolate design must be:

Materials

Final drawing of product

Tools

Techniques:



Descriptor

Level 4

Level 5

Plan, organise and make.

You have produced a step-by-step plan on how to make your pop up book that lists tools, materials and equipment needed.

You use your plan to help you make your pop up book and suggest alternative designs. You make notes on any changes you make.

Descriptor

Plan, organise and make.

Level 4

You have produced a step-by-step plan on how to make your pop up book that lists tools, materials and equipment needed.

Level 5

You use your plan to help you make your pop up book and suggest alternative designs. You make notes on any changes you make.



Graphic Design —Pop up book Project Assessment Results

	Level achieved	How I can improve my work	Date
Generate, develop, model and communicate ideas. Use understanding of other's designing.			
Plan, organise and make.			

Teacher comments on overall achievement.

Commendations awarded?

Pupil working on target?

Pupil working below target?

Pupil working above target?

Systems and Control

Evaluation of making

Task	What I did. Include techniques, materials, equipment and machinery used.	Problems I had. Explain how you overcame any. Did you have help?	What I will improve for next time?
Pillar Drill H and S	E.G I learned how to use the pillar drill safely and effectively. Jigs were used to hold the work while drilling.		
Template manufacture			
Template shaping and finishing			
Pillar Drill Acrylic and MDF			
Torch assembly			
Final design/ Template transfer			
Coping Saw/ cutting and shaping torch			
Finishing and polishing			
Forming the button			

Level 4: You identify what is working well and what could be improved to overcome technical problems. You reflect on your designs as they develop, recognising the significance of knowledge and previous experience.

Level 5: You check their work as it develops, solve technical problems and show some evidence of creativity as you modify your approach in the light of progress. You test and evaluate your products, showing that you understand the situations in which the products will function.

Photograph of final product:

Explain which techniques you have used and the quality of finish you have managed to achieve.

Level 4: You have worked with the materials and used the correct tools with some accuracy. You have completed a well finished pocket torch.

Level 5: You can explain why you have selected certain materials and how they are suitable for your pocket torch. You know how to use the correct machinery and can use them with accuracy.

Systems and Control —Torches Project Assessment Results

	Level achieved	How I can improve my work	Date
Generate, develop, model and communicate ideas. Use understanding of other's designing.			
Plan, organise and make.			

Teacher comments on overall achievement.

Commendations awarded?

Pupil working on target?

Pupil working below target?

Pupil working above target?

Design and Technology End of Year Evaluation



Please tick which box best answers each statement.	Agree	Disagree	Unsure
I have enjoyed most aspects of D&T.			
I have found most work set in D&T too easy.			
I have found most tasks set have been explained clearly.			
Learning objectives in lessons have usually been set and achieved.			
I have mostly understood feedback given by the teacher.			
I understand the assessment system in D&T.			
My work has been regularly assessed.			
I feel confident in most practical lessons.			
I always feel safe in D&T lessons.			
I feel rules are clear in all D&T lessons.			
I feel rules are enforced by all teachers in D&T.			
I feel that all pupils are treated equally and fairly in D&T lessons.			
I had enough time in each project to complete all work set.			
What has been your favourite project in D&T this year?			
Why was this your favourite project?			
What was your least favourite project?			
How do you feel this project could be improved?			