

Design and Technology: Year 3/4 project

These sheets are intended to support Year 3/4 Design and Technology work by helping ensure that all the aspects of the curriculum are addressed and covered.

Index of sheets:

Evaluating existing products

- Evaluating: investigating an existing product (comparing existing products – there are two alternative versions of this sheet – single sheet version and a two sheet version)

Establishing the design criteria

- Designing: outlining what is being designed, the user, the purpose, etc.
- Designing: design criteria for my product (there are two alternative styles of this sheet)

Generating ideas for a design

- Designing: ideas for my product (this is for the children's first ideas and could be reproduced back-to-back hoping for at least three different ideas)
- Designing: improving and developing the best ideas for my product (this is where children show they can develop their first ideas, maybe combining the best features from the different ideas they started with, also adding detail)
- Designing: presenting my selected design idea (this is for children to detail the product they intend to make – it is not their “final design” as they need to be encouraged to modify their design throughout the making process as they find and overcome problems and, perhaps, have other and better ideas to modify their design – this is the iterative process)

Planning the making stage

- Making: selecting the tools, equipment, materials and components 1 & 2 (these are for the children to record their choices and to explain those choices)
- Making: planning the work (there are two alternative styles of sheet for this activity)

Making

- Making: further improving my design while I am making it (for the children to fill in as they identify and overcome problems and make further improvements during the making stage)

Evaluating

- A presentation drawing of my finished product
- Evaluating: my own thoughts (there are two alternative versions of this sheet)
- Evaluating: user's evaluation sheet (a sheet to collect feedback from the person you made the product for)

Evaluating: investigating products

Look at a range of products and choose two to compare. Draw them and then answer the questions about each one.

1

2

Who is it most suitable for? Why?		
How does it work?		
What materials are used?		
What joining methods are used?		
What design features do you like?		
What size is it? (record measurements)		
What special features does it have? How useful/important are these?		

Evaluating: investigating products

Comparing products

Product 1

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Who is it most suitable for? Why?	
How does it work?	
What materials are used?	
What joining methods are used?	
What design features do you like?	
What size is it? (record measurements)	
What special features does it have? How useful/important are these?	

Evaluating: investigating money containers

Comparing products

Product 2

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Who is it most suitable for? Why?	
How does it work?	
What materials are used?	
What joining methods are used?	
What design features do you like?	
What size is it? (record measurements)	
What special features does it have? How useful/important are these?	

Designing: overview

What I am designing and making (the product): _____

Who I am making it for (the users): _____

What it is for and what it should do (its purpose/purposes): _____

How it will work: _____

How it is suitable for the person/people I am making it for: _____

Designing: design criteria for my product

I am designing and making a _____ for _____

I want my product to (list the most important feature first):

1. _____

2. _____

3. _____

4. _____

5. _____

Further notes:

Designing: design criteria for my product

I am going to design and make a

for

I want my product to (list the most important feature first):

1. _____

2. _____

3. _____

4. _____

5. _____

Start to draw your ideas here:

Name: _____

Designing: ideas for my product

Ideas for my product:

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Name: _____

Designing: improving and developing the best ideas for my product

(If you model your ideas in paper, stick your paper models onto these sheets too).

Name: _____

Designing: presenting my selected design idea

Draw and label the final design you have chosen.

Making: selecting the tools, equipment, materials and components (1)

List the tools and equipment you considered using on the lines below.
Put a ring around those you choose to use to make your product.

List the components and materials you considered using for your product and to decorate it on the lines below.
Put a ring around those you choose to use.

If suitable, stick a sample of the materials you have chosen in this box.

Making: selecting the tools, equipment, materials and components (2)

Explaining my choices

The main tools, equipment, materials and components I chose

Reasons for my choices:

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Making: planning the work

Action plan:

List the sequence of activities you will need to go through to make your product:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Make a pattern/template.

When you have finished using it, glue it here.

Making: planning the work

How will I start? What will I do next? How will I finish?

What tools and materials will I need? List them here.

What do I need to think about while I am making my product?

Making: further improving my design while I am making it

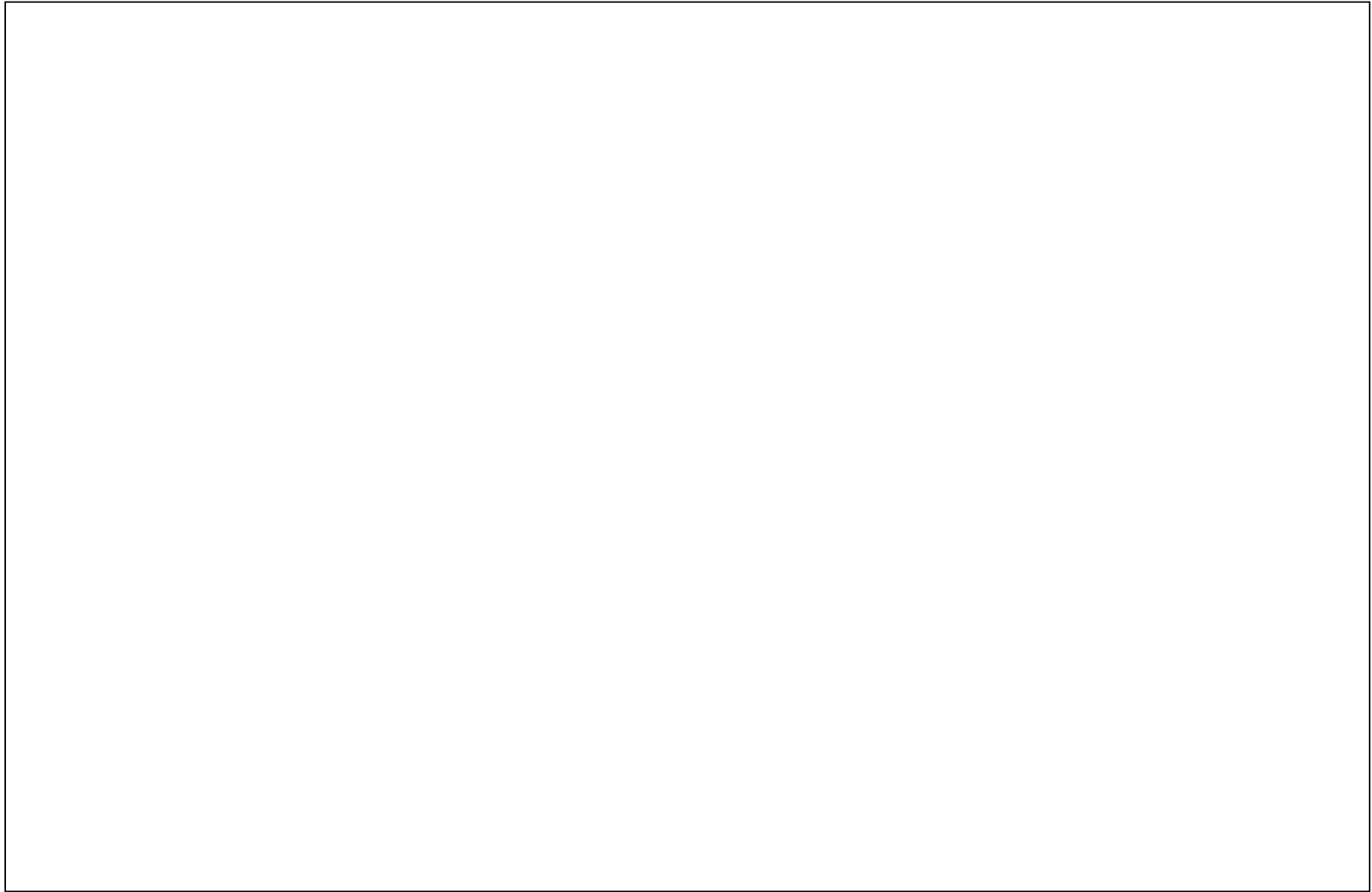
As you are making your product,
list the problems you come across here:

Describe the solutions to these problems :

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Name: _____

A presentation drawing of my finished product



Evaluating: my own thoughts about my product

After you have finished and tested your product, say how well you think it meets your design criteria.

Design criteria	Tick			Comments
	Fully meets	Partially meets	Does not meet at all	
1				
2				
3				
4				
5				

What are the best parts of your design?

What parts of your design would you change and why?

Evaluating: my own thoughts about the product

Does your product have all the features you identified earlier? If not, why not?

What do you like about your product?
What could you improve about your product?

Could you have planned your work better?

What have you learnt from doing this activity?
Where else can you use these new skills?

User's evaluation sheet: evaluating a money container designed for you

Does the product have all the features you wanted? If not, what is missing?

Thinking about how well the product "works":
What do you like about it?
What would you like to be improved?

Thinking about how well the product is made:
What do you like about the it?
What would you like to be improved?

Thinking about how good the product looks and feels:
What do you like about it?
What would you like to be improved?