



# Booth Museum Project

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146755

*Design an imaginative set  
of materials for primary  
school children age 7-11  
visiting the Booth Museum*

To ensure I understand the goals of the project entirely

# Analyse the Brief

**Brief:** To design an imaginative set of learning material(s) for primary school children age 7 -11 (key stage II) visiting the Booth Museum.

- The material should:
  - Make learning about nature engaging, open and accessible
  - Encourage interactivity
  - Capture the imagination, which in turn, makes learning a fun activity
  - Be memorable and imaginative
  - Enable the brand to live outside the museum itself
- You must choose to design material that focuses on ONE area of the museum. You may want to re-visit the museum in your own time.

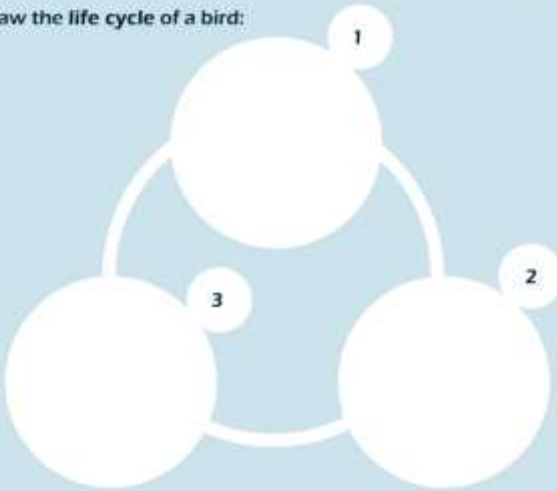
What I take from this is;

- Target market: 7-11 year olds
- Engaging - needs to be involving, interactive, thought provoking
- Open & accessible – should be reproducible at home by average joe, regardless of education
- Interactive – again, needs to involve *doing* something, not just writing down/answering questions
- Capture imagination – thought provoking, toys, ideas?
- Memorable – kids remember what? Things that amaze them, make them go “wow!”, things that are interactive & engaging.
- **Enable the brand to live outside the museum itself** – brand the materials with Booth Logo, get the kids to take it home? Share with friends, characterful and memorable material will help here.

**Hobo Standard**

BOOTH MUSEUM

Draw the life cycle of a bird:



1

2

3

What is your favourite bird in the museum?

Why?

**LITHOS PRO**

BOOTH MUSEUM

Garamond ipsum dolor sit amet, consectetur adipiscing elit. Quisque eleifend sem orci, sed elementum eros auctor vestibulum. Morbi varius purus erat, ut dignissim sapien facilisis a. Curabitur egestas nunc accumsan

Design your own prehistoric animal!

What kind of **habitat** would your animal live in?

Is it a **Herbivore** (eats shoots and leaves),  
or a **Carnivore** (eats meat)?

Name your animal:



The museum curator expressed the need for the **inclusion of the national curriculum in the material** when we visited.

After looking through the national curriculum, I found that the **life cycle** and **habitats** are two major topics that relate well to the booth museum, so I quickly drew up these two sheets in photoshop.

I chose hobo standard and **eras demi ict** for the bird sheet because of their airy but chunky qualities. They will be bold enough for the children to read well, but not so bold that they look out of place.

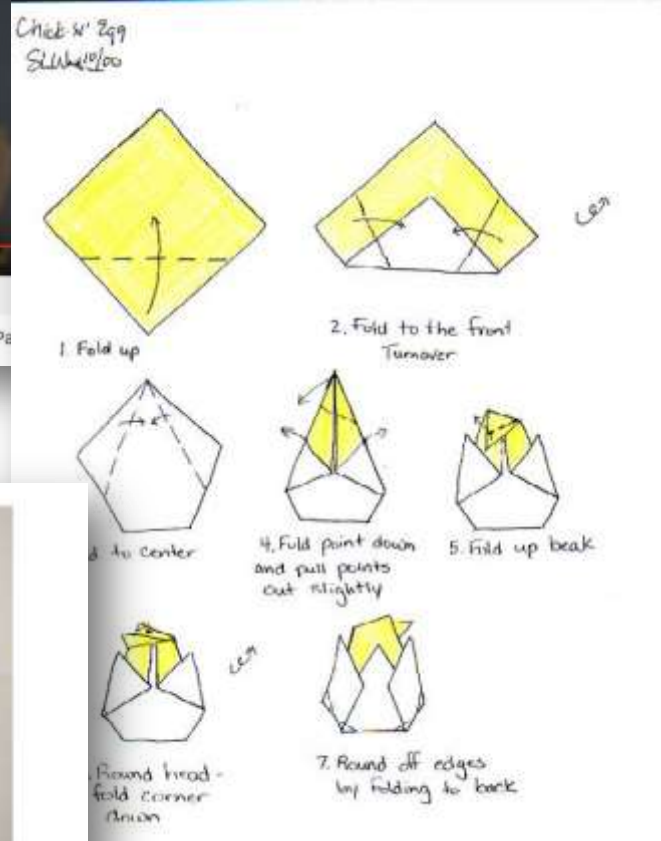
For the fossils sheet I chose Lithos pro and garamond for their prehistoric feel and texture, that still retains the readability needed for my younger audience

### Evaluation

As I am supposed to be focusing on one section of the museum, I may **merge these ideas**;

"Design a bird, now draw its life cycle" is a possibility.

I don't want to restrict it to a 2D format, however – I could make it **3D in an origami style** perhaps...



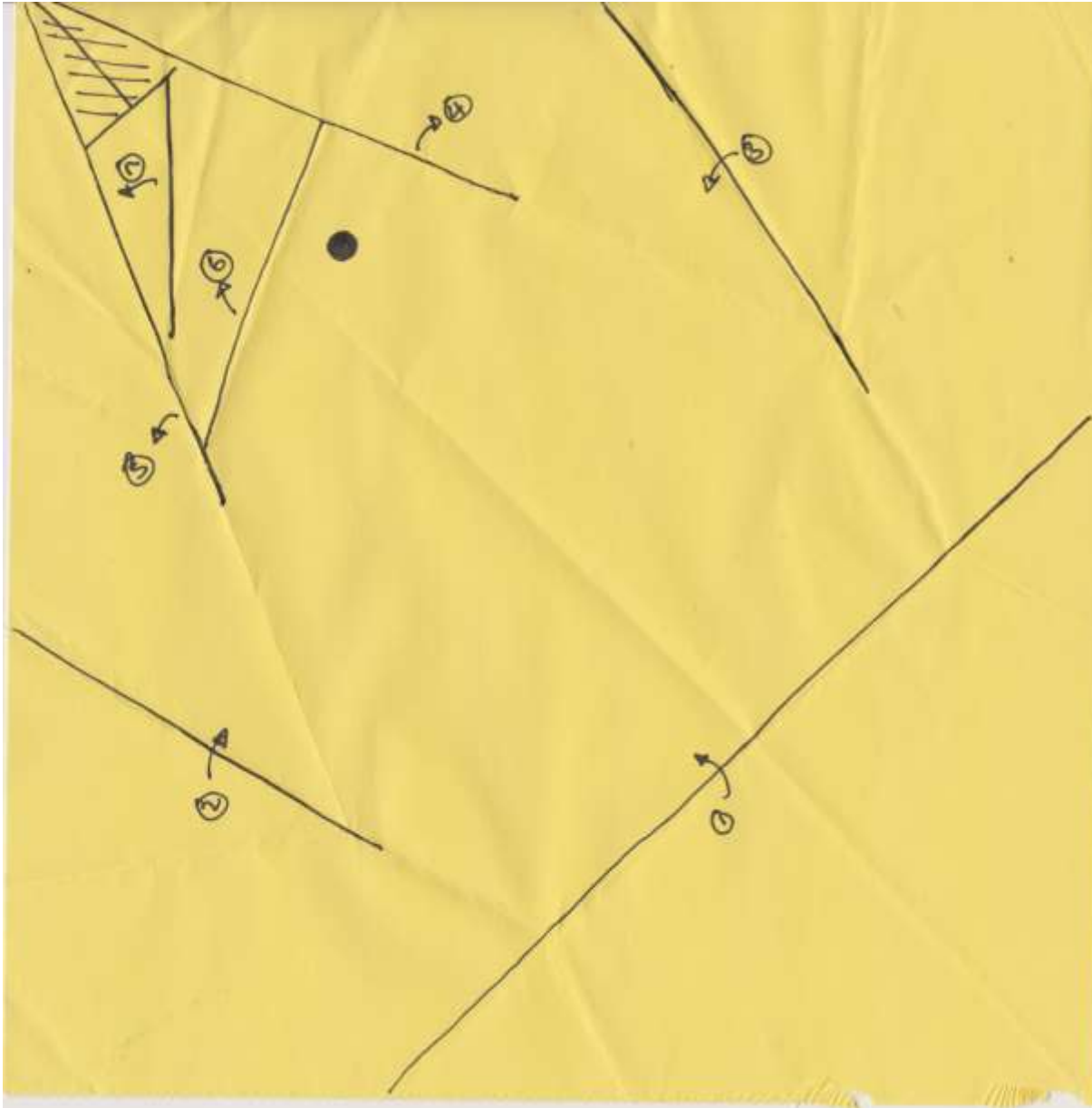
Did you make this origami? If so, upload your photo. (2MB limit)

After browsing through many, many **origami tutorials** online, I picked **3 designs** to use for the life cycle.

Folding a fully 3D egg without using any glue seemed to be very difficult, and for this project, I am set on **keeping costs as low** as possible for the museum – glue would only add cost (and mess!) to the equation. So I decided on the “Chick in Egg” design on the right.

I chose these designs because, upon trying, they were **relatively simple** compared to others, and they increase in difficulty through the cycle of egg>chick>bird, which is a nice progression.

I would like to try and **integrate the instructions with the actual paper being folded**, to remove the need to flit your eyes between origami and instructions and streamline the process



After folding an Egg Bird (as I am now calling it), I unfolded it and **drew across the fold lines**.

I then **numbered them**, in the order they have to be folded, and added **direction arrows** to indicate which way to fold.

The hatched section in the top left is the beak of the bird – I'd like to colour this to make it more realistic.

The back of the paper is white, meaning that the **egg is white**. I may ask the children to **decorate** their eggs when they have folded Egg Bird, to add to the **character** of the product. Parents usually like when their child gives them something they made. This will hopefully "Enable the brand to live outside the museum itself".

Aim:

To develop my idea further

# Development of Origami

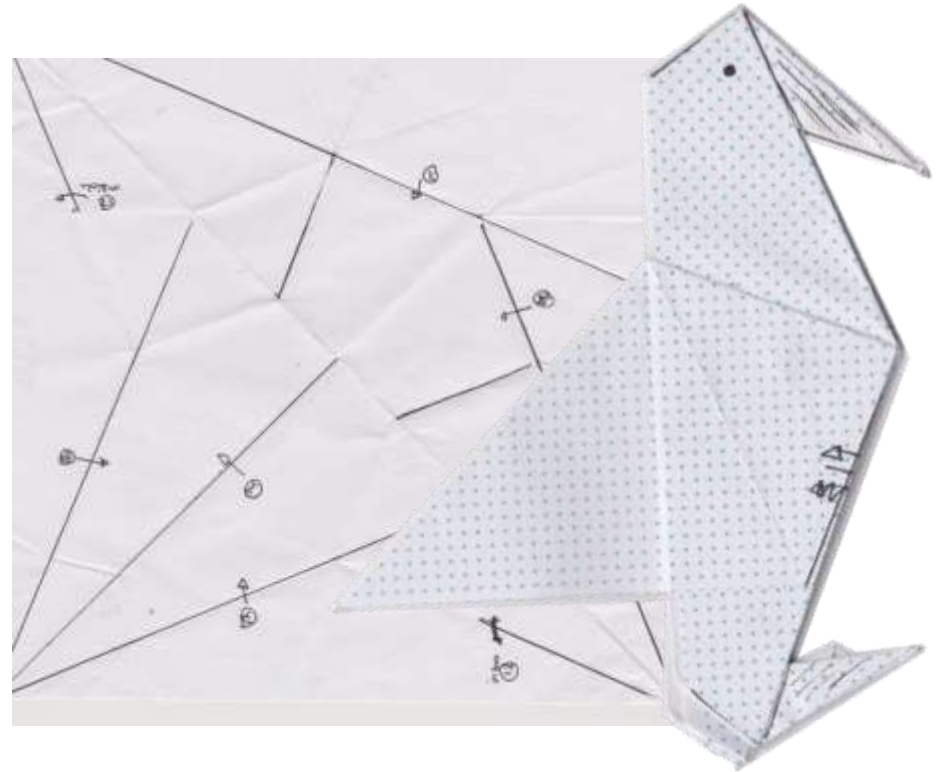
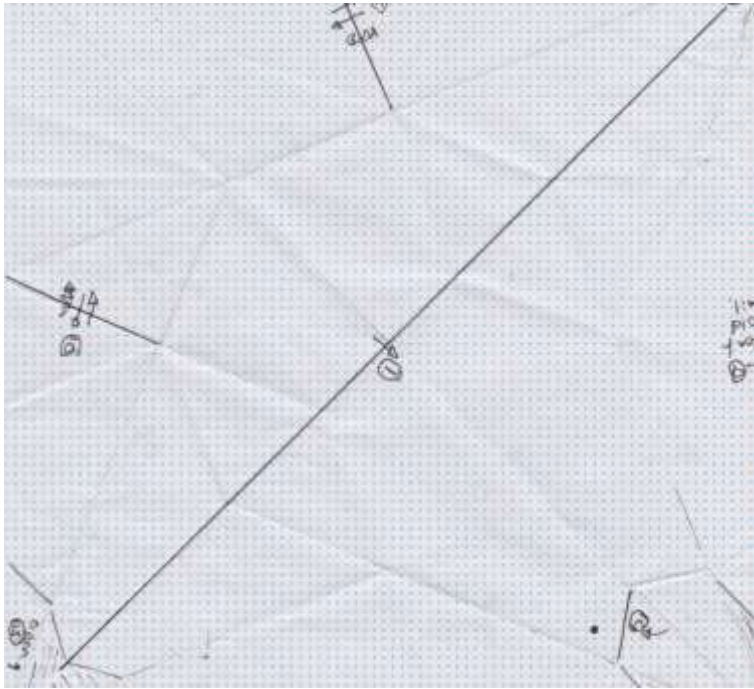
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The Chick requires **two sided** instructions in this format, but is perfectly do-able.  
(My scanner is on its way out, so it managed to cut off the top of the 2<sup>nd</sup> image).

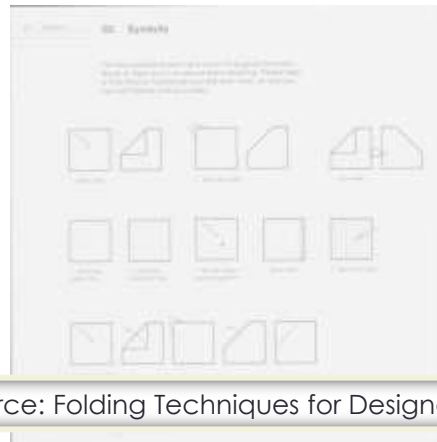
Again, I shall get the children to **decorate the Chick**, as well as the Egg Bird, not just for continuity, but also to help get the brand recognised outside the museum.

I will provide an eye on the chick, and the coloured in beak, as the chick doesn't look like a chick without them unfortunately. This will get the childrens **imagination**s going, helping to make a **fun learning activity**.



Big Bird proved to be **much more complex**. The instructions quickly became **messy and unclear** when I tried to document them on the workpiece itself.

Diane suggested that I simply put the **instructions on a separate sheet**. This looks like the only viable option. Hopefully it will simplify things a little. She also showed me a book that explains origami in detail – there are certain **symbols** that can be used, that are universally recognised. Handy!



Source: Folding Techniques for Designers, P.Jackson

### Evaluation

I shall create the first models with the instructions on-model, as planned. The Big Bird will have a separate instruction sheet, for clarity and ease of use.

Aim: To develop what the children will do with their paper birds after they have made them

# The Life Cycle Development

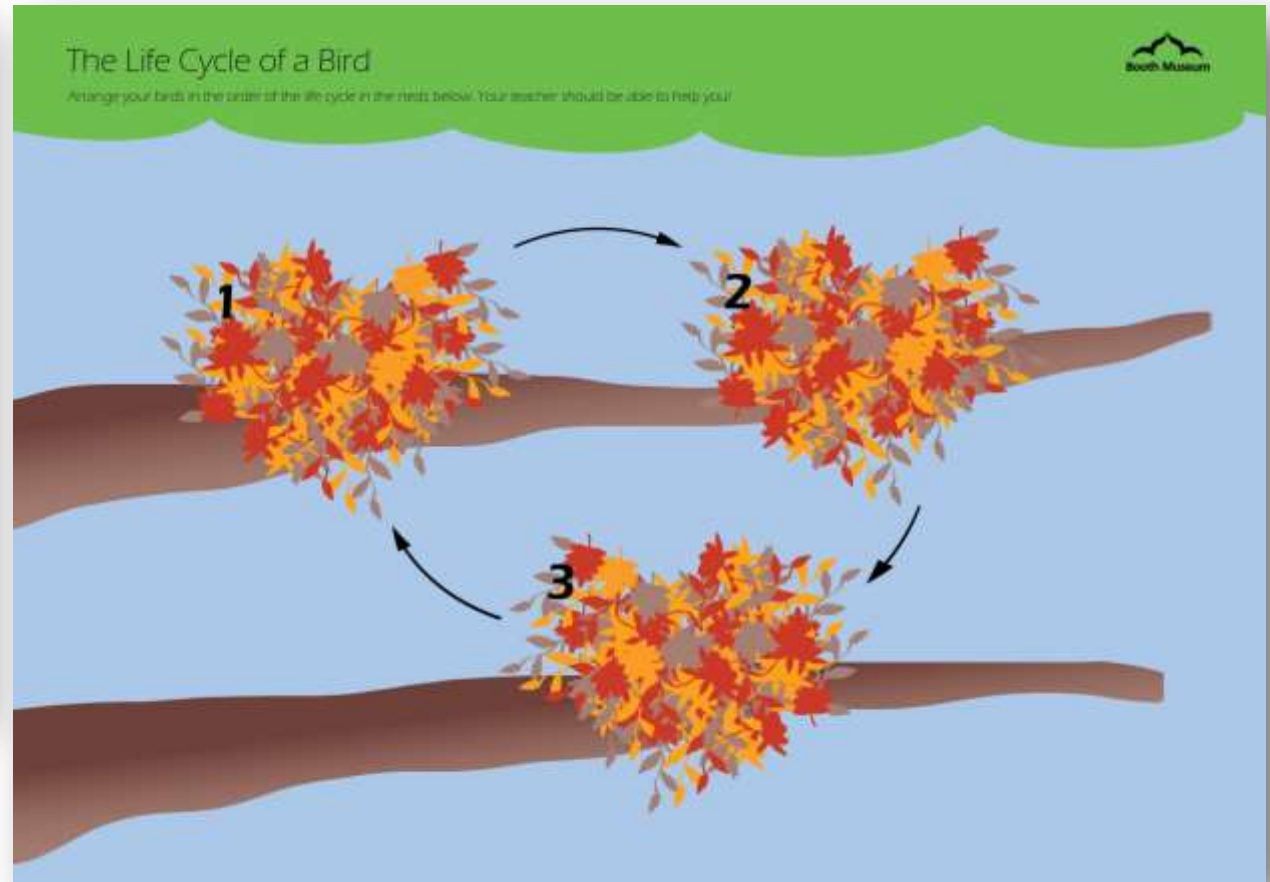
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Placing the birds on a sheet like this? (left)

A bit **boring**, in my opinion, although for a large class size, **cost effective** – get it printed on A2 or A1 to get everyone involved!

I mocked up a better prototype (right)

The birds sit in their nests – relating to the habitat theme discussed at initial.



Diane suggested having **origami nests** too.

This got me thinking – why not have an **origami tree**? This would really capture the imagination, and be interactive...



Advantages	Disadvantages
A tree was cut down, turned to paper, then back into a tree. That's pretty cool.	Could get damaged very easily
Captures the imagination really well	Light, might fall over in use.
	Long time to make (time is short!)

With time now running fairly short, I thought to myself – why not get a **real tree**?

This would not only **shorten time** dramatically, but also *really* capture the child's imagination – “I made a bird and put him in his nest in a real tree at the museum Mom!”

This helps the brand to live outside the museum.

So I went to **Wyevale**.

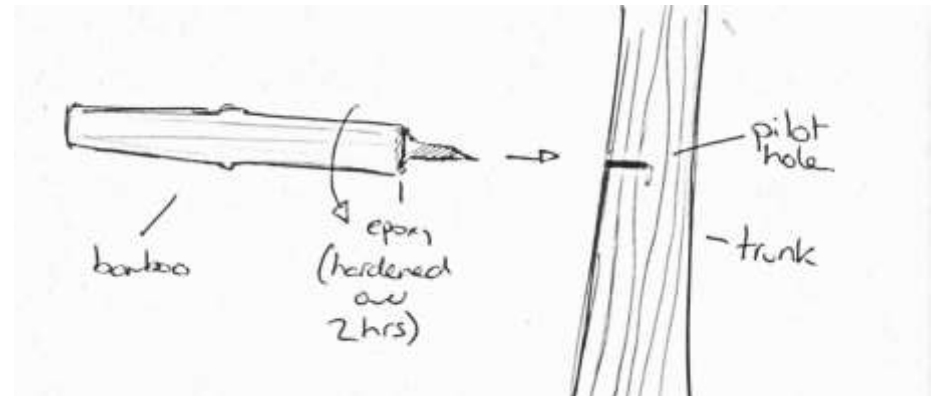
I wanted a tree with leaves at the top, and a tall, branchless trunk.

I bought some **bamboo sticks** from Wyevale too, and some **Araldite Epoxy Resin** from Halfords on my way back.

I used the epoxy to glue wood screws to the end of the bamboo.

I then screwed the bamboo into the branchless section, to create faux branches for the nests to sit on.

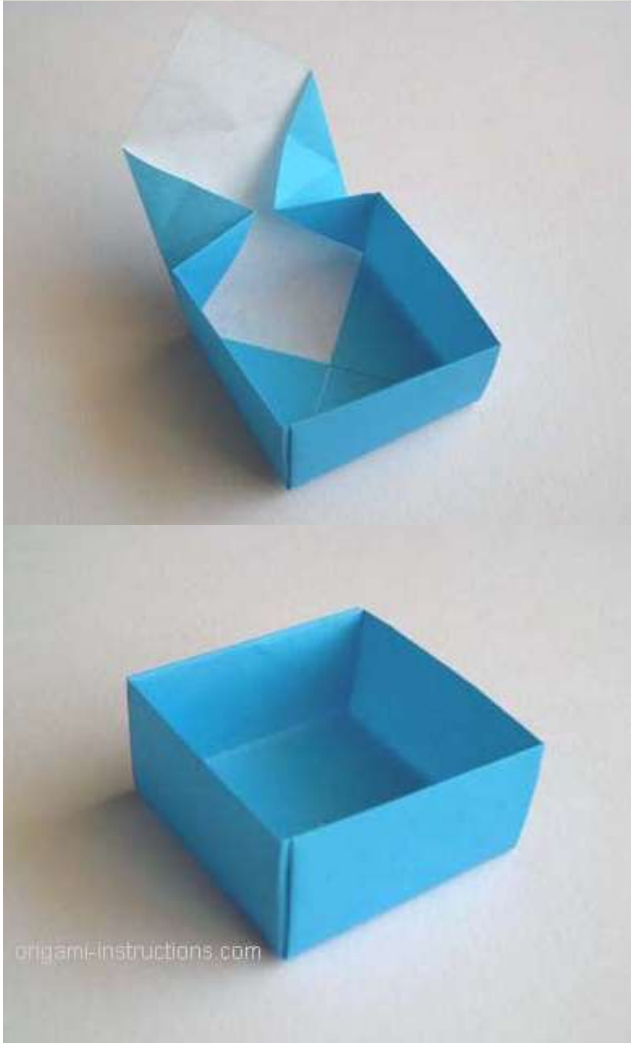
Now I just need to find out how to make a nest...



I have also decided to include an **information sheet** on the life cycle of birds, to inform the children on **how to complete the task set**, and also provide more context.

# Making nests

Source: <http://www.origami-instructions.com/origami-box.html>



Of all the origami box designs I looked at, it was the first one I like the most.

It is **simple**, and can be made as big or as small as required.

It's simplicity would allow the museum to make their own should the ones I provide get damaged or worn out through use.

I made 3 nest boxes with Green origami paper, to try and represent the leaves that should be on the branches of the tree.

I could have printed a twig pattern out to give a nest like appearance, but I felt the simplicity of the box would be complimented by a simple solid colour.



I stuck the nest to the faux branch **using hot glue**. This set far quicker than epoxy would, though the bond is not as strong.

Jackdaws love my big sphinx of quartz. 24pt

Jackdaws love my big sphinx of quartz. 20pt

Jackdaws love my big sphinx of quartz. 18pt

Jackdaws love my big sphinx of quartz. 16pt

Jackdaws love my big sphinx of quartz. 24pt

Jackdaws love my big sphinx of quartz. 20pt

Jackdaws love my big sphinx of quartz. 18pt

Jackdaws love my big sphinx of quartz. 16pt

**Jackdaws love my big sphinx of quartz. 24pt**

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**Jackdaws love my big sphinx of quartz. 20pt**

**Jackdaws love my big sphinx of quartz. 18pt**

**Jackdaws love my big sphinx of quartz. 16pt**

After trying lots of different fonts, from **Google Fonts**, **dafont.com**, and those pre-installed on my computer, I narrowed my selection down to these 4 fonts. I will narrow this further down to 2 fonts later, to help streamline the final look of my work.

I chose these fonts because they are all rather **bold** – good for **younger readers**. They are also **sans-serif** (aside from cooper black, which has round serifs). This helps maintain a **friendly, fun look**.

I am still leaning towards eras demi and hobo std, as I think they have a nice **contrast** that may help with distinction between headers and body text.

To decide on suitable colours for the final design of the information sheet on life cycles

Polly has previously mentioned to me the use of **PANTONE** colours to aid my colour choices, as this helps with colour matching during commercial print. I have therefore had a look at some **colour charts**.

I want my colours to represent **nature**, so will focus on sky blues, grassy/leafy greens, muddy browns and sunny yellows.

**Brighter** colours should draw the childrens' attention as well.

The colours I have chosen are as follows. I chose a **small colour range** to simplify the aesthetic, so it is **easier to interpret and understand**.



Jackie will budget for the most expensive zoology equipment

Jackie will budget for the most expensive zoology equipment

**Jackie will budget for the most expensive zoology equipment**

**Jackie will budget for the most expensive zoology equipment**

## Evaluation

Cooper Black is too bold against the lighter colours in my opinion.

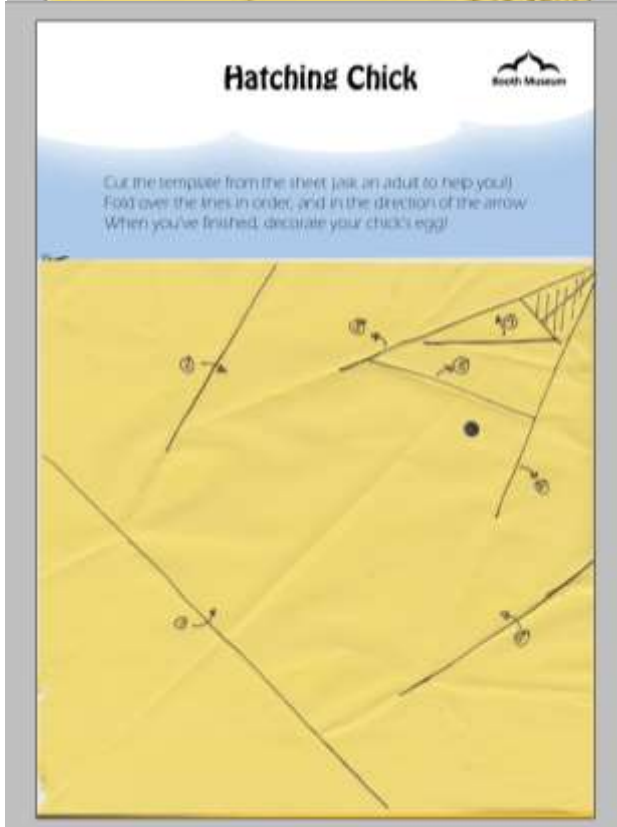
Tekton (the comic sans lookalike) is too thin against the dark brown & green. I won't be putting text over 357 M.

Hence, my original decision stands. I shall use Hobo Std for headers, and Eras Light for body text.

To draw up the final design for Egg Bird

# Egg Bird CAD

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The proportions of this page are largely defined by the square origami piece itself, which needs to be **cut** (or could be made with perforations) from the sheet.

Proportions from the top third are roughly  $\frac{1}{2}$  header,  $\frac{1}{2}$  body text.

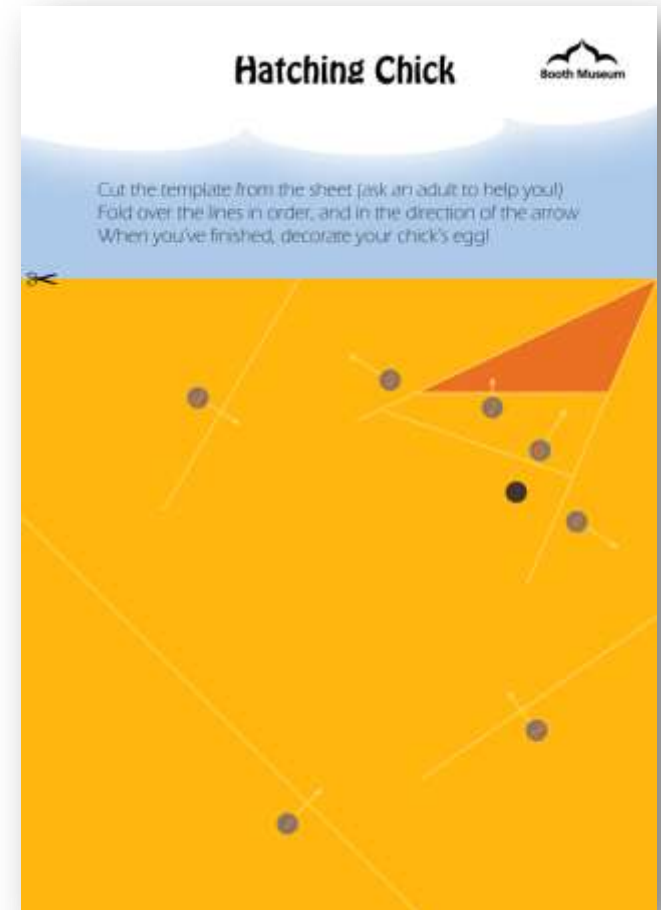
Looking at the first design, I am not entirely happy with the font choice. Eras Demi looks **far too bold** against the light blue background.

After trying **Eras Light**, I think a change of font choice is in order. This fits the sky/bird theme much better.

The bold heading can stay – **each sheet needs to be** easily & instantly **identifiable**

I chose **not to use a grid** on this, as I felt it would be **restrictive** and prevent the clean layout given by having the title and body centered.

The offset booth logo **displaces** the central design and helps to break things up.

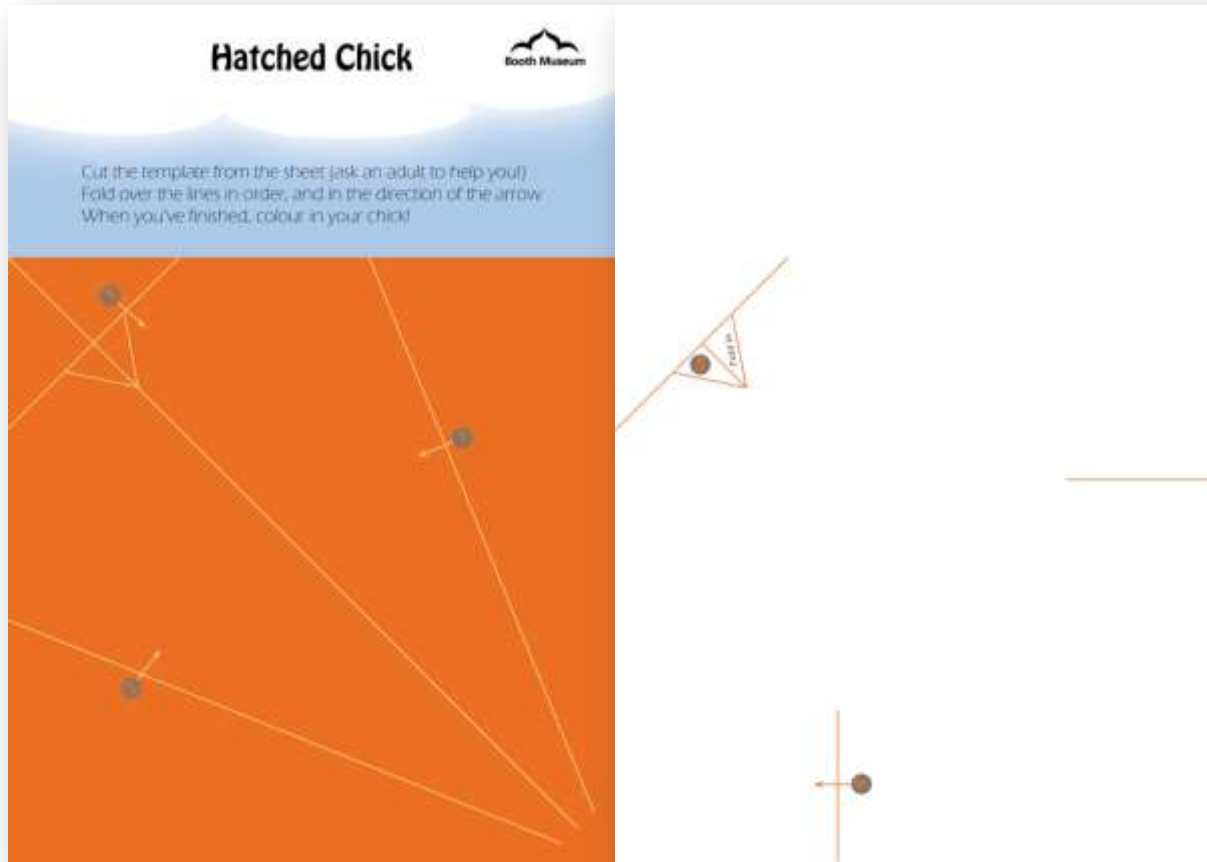


Pantone colours are used for the Egg Bird section, and are **lively, bright colours** more than suitable for my target market.

To draw up the final design for Chick

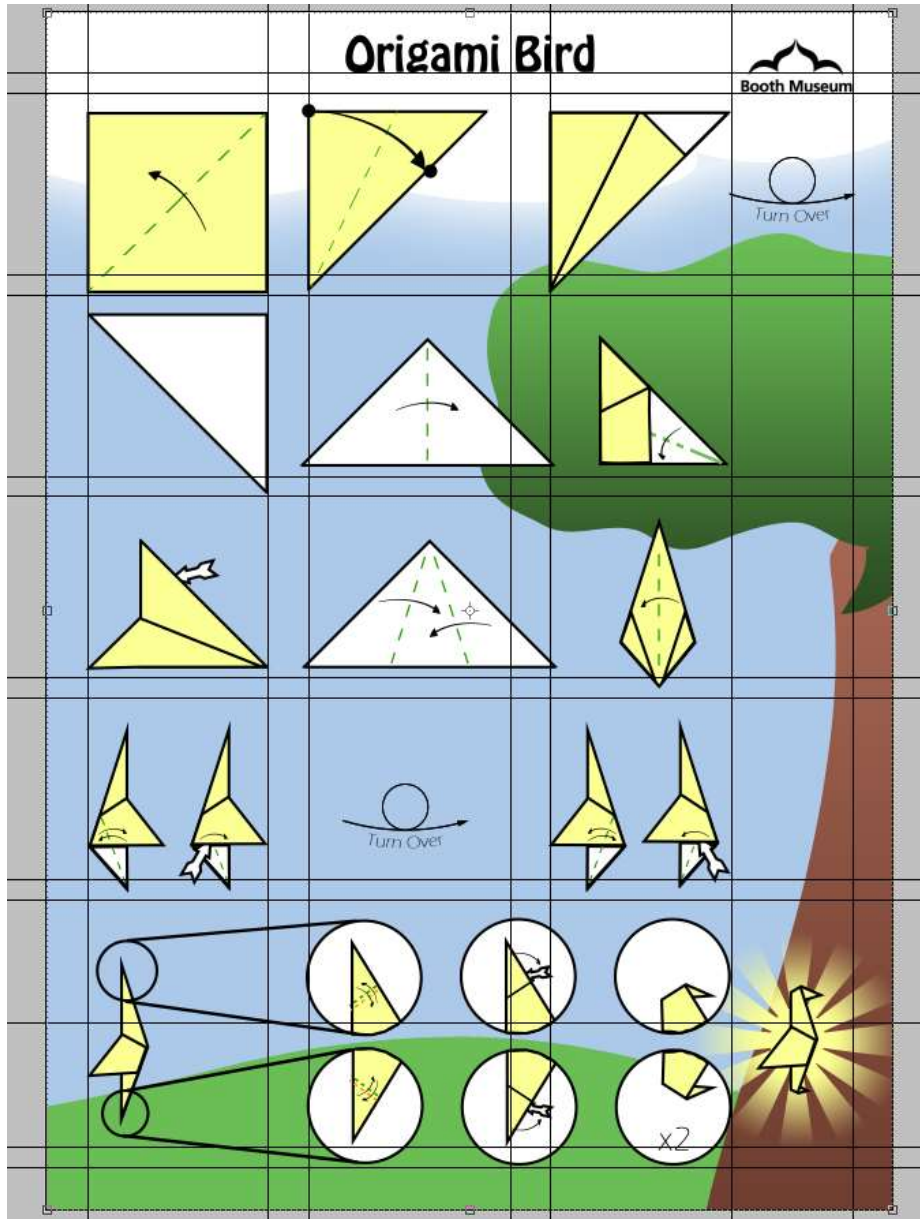
# Chick CAD

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I used the **same proportions** as for the Hatching Chick, but this time, used orange as a background, to help distinguish between the two sheets.

The two chick worksheets will be printed **A5 size**, to keep them small – this way, **more chicks** can fit in the nests on the tree, which is good for **larger classes**.


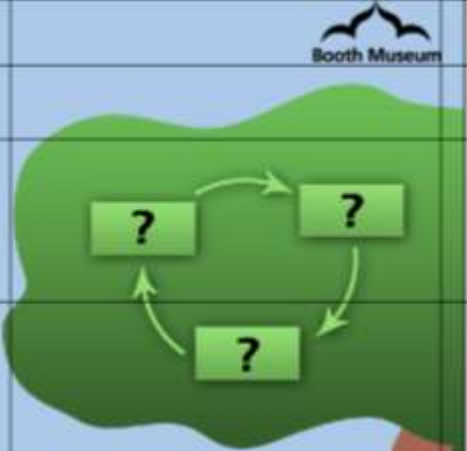






The **grid was very important** on this sheet, defined largely by the square shape of the origami paper. This created a **narrow column on the right**, filled by a background tree to provide more depth.

The grid shown is slightly out here as I had to move the whole instruction set around to get it to sit right on the page

The background image I drew up is intended to **break out** of the grid a little, to give a **playful look**

To draw up the information sheet that will help the children complete their life cycle activity

The Life Cycle of a Bird		
	The mother bird produces her eggs. The eggs have to be kept warm before they hatch, so she sits on them in the nest.	 <p><b>The Tree of Life</b></p> <p>Use the sheets provided to find out very early on a girl chick and chick!</p> <p>When you're finished, decorate your bird to match a bird in the museum. Colour in the chick's egg shell!</p> <p>What kind of habitat does your bird live in? Is it a farm, forest, or city?</p> <p>Arrange the three models you have made in the Booth Museum 'Tree of Life'!</p> <p>Put them in the order of the life cycle. Ask your teacher to help you if you get stuck.</p> <p>Don't forget to take your bird home!</p>
	The chicks hatch out of their eggs after around 20 days. They are unable to walk or fly and very dependant on their mother.	
	The chicks will need their mother to find them food and feed them. They will have to be protected from predators, so the nest will be hidden.	
	When the chicks have grown up, they will learn to fly and leave their nest to find a mate. Now they are able to look after themselves.	
	When they have found a mate, they will reproduce and the new mother lays her eggs. The cycle continues.	

I employed a **tight grid** here to keep it **easy to read and follow**.

I used the **rule of thirds** horizontally.

Same vertically, twice (so six sections)

The top section was split in two to create a **header section**

A **medium margin** keeps it all contained **neatly**.





I felt the tree needed a title, so I made one up using the booth logo, and eras demi – as it is bold and clear. I then mounted it on card stock, and secured it using a sticky pad.



The arrows are an essential part of showing the flow of the life cycle, and it's continuous nature. These are also mounted on card stock.

Aim:

To present the final piece

# The Final Product

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To evaluate the final product

## Brief

- The material should:
  - Make learning about nature engaging, open and accessible
    - *It engages the user by having them interact with the sheets, and make something*
    - *It is open as these can be uploaded to the Booth website, open for anyone to access*
    - *It is accessible as most children should be able to fold paper*
  - Encourage interactivity
    - *It gets the children directly involved with the material, and so does encourage interactivity*
  - Capture the imagination, which in turn, makes learning a fun activity
    - *The use of a real tree will hopefully capture the imagination of any 7-11 year old*
  - Be memorable and imaginative
    - *By giving the child something that they make & can keep, they will look at their models at home and remember the Booth Museum*
  - Enable the brand to live outside the museum itself
    - *The sheets all contain the Booth Museum logo, and so when taken home, will help to raise awareness for the museum*

## Senior Learning Officer of Brighton & Hove Museums

- An engagement with the environment
  - *The children engage with the tree when they sort the birds into the order of the life cycle*
- Stepping stones
  1. *Make a hatching chick*
  2. *Make a hatched chick*
  3. *Make a grown up bird*
  4. *Learn about the life cycle*
  5. *Arrange their model in the tree*
- Think about the child being in physical space
  - *The tree is part of the physical space*
- Thinking
  - *Making*
- Looking
  - *All the time*
- Listening
  - *To help if they need it*
- Designing
  - *When they design the egg shell, or chick – or when they colour in big bird*
- Imagining
  - *As though their birds are real*
- Connecting
  - *With the task in hand*

## Conclusion

My product satisfies the brief, and also follows the ideas of the Senior Learning Officer