

Eco Bag Project

Year 7 Technology



Name: _____

Class: _____



This booklet works in conjunction with www.sactas.weebly.com



Glossary of Terms

On this page you will need to write down the definitions for the terms, items and concepts explored in this unit.

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____



Identification of the need

On this page you will need to identify and explain the problem you will be solving in this project.

Design Situation

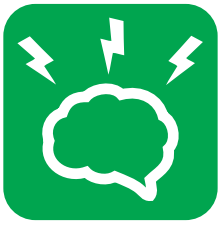
Plastic bags are one of the least recyclable and most environmentally problematic packaging materials. Many countries are now banning the single-use plastic bag, as the toxic potential of discarded plastic bags in our environment causes a large degree of harm. Up to 4 billion plastic bags per year are discarded in Australia. 150 million of these end up in our oceans. Reusing materials and bringing your own bag with you to the shops is one way you can reduce your environmental impact and reduce the number of plastic bags in our oceans and landfill.

Design Brief

Referring to the design situation and design brief details on sactas.weebly.com, use the word bank to complete the close passage to define the problem you are solving in this project:

Graphic Single-use Fabric Sewing Machine
Printing Sewn Woven Eco

This product requires you to use a length of _____ and a range of _____ and printing techniques to create your eco bag. You will be required to design a _____ inspired by your knowledge of the importance of reducing _____ plastic bags. Your design will need to be appropriate for heat _____ onto the fabric you have _____ into a bag. You must use the sewing _____ to sew together the supplied fabric and _____ straps to create your _____ shopping bag.



Brain-Storm

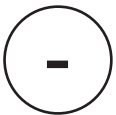
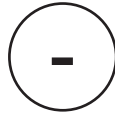
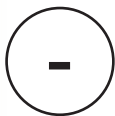
In the space below you will create a brainstorm lead by your teacher to help explore ideas and themes for your project.





Past Project Design Analysis

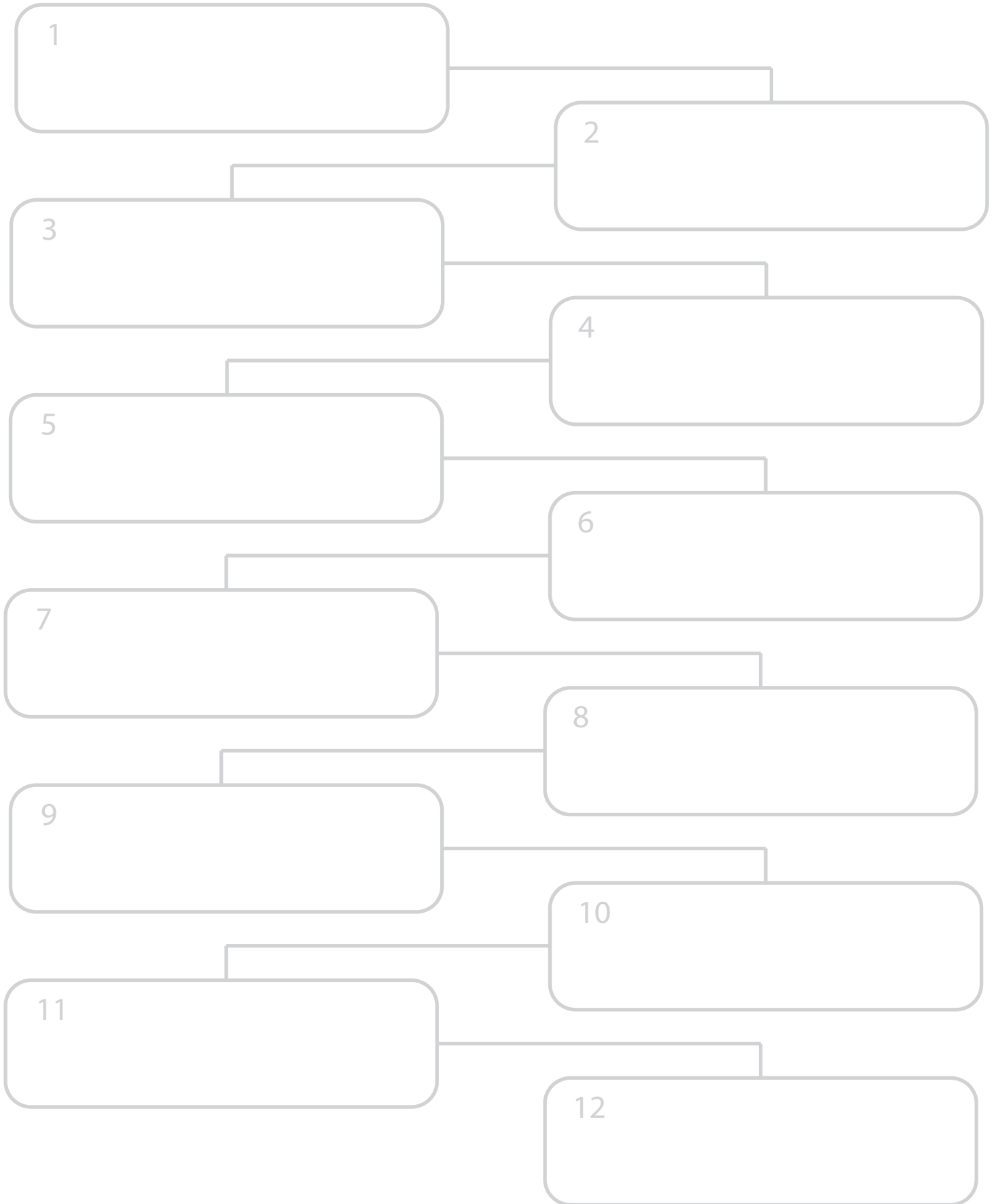
Using images from the www.sactas.weebly.com you will need to do a PMI analysis on three designs.

A large, empty white rounded rectangular box intended for past project design analysis.A large, empty white rounded rectangular box intended for past project design analysis.A large, empty white rounded rectangular box intended for past project design analysis.



Steps of Construction

Based on a class discussion with your teacher you will need to record the required steps of construction involved in this unit.





Tools & Techniques

In the space below you will need to draw the tools specific to the unit and explain how to use them correctly and safely.

A large, empty white square with rounded corners, intended for drawing and writing.A large, empty white square with rounded corners, intended for drawing and writing.A large, empty white square with rounded corners, intended for drawing and writing.



Skill Development Task

In the space below you will explore designs for a small project which will help you develop the skills necessary for this unit.



Skill Development Reflection

In the space below you will draw in your chosen design for the skill development task and reflect on what you learnt from it.

What have I learnt from the skill development task?

How will my experience in this task impact the design of my final project?



Idea Generation & Development

Sketch ideas for your monogram design to create your personalised branded signature. This will be hand stitched onto your bag.
Remember to annotate your sketches!



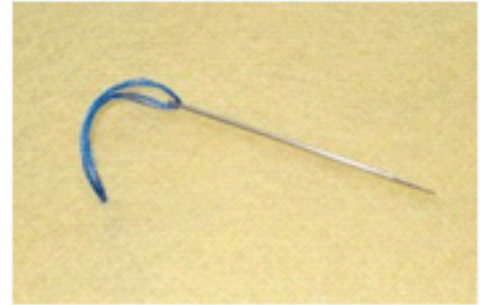
Sewing Techniques

Carefully study the sewing technique below so that you can master this skill in your project.

RUNNING STITCH

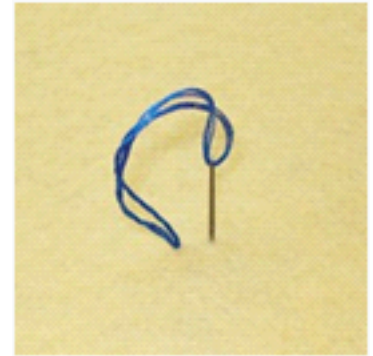
Step 1:

Begin the running stitch by poking your threaded needle up through the fabric.



Step 2:

Poke the needle back down through the fabric next to where you just came up, and pull the thread down into your first stitch.



Step 3:

Now poke your needle back up through the fabric, leaving a space from the previous stitch.

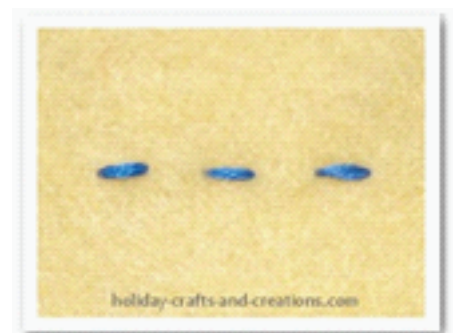
Then poke the needle back down through the fabric again making your second stitch.



Step 4:

Now just continue this and you are on your way!

See how easy this stitch is?





Sewing Techniques

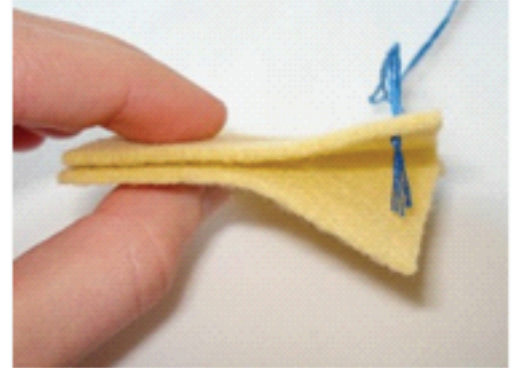
Carefully study the sewing technique below so that you can master this skill in your project.

WHIP STITCH

Step 1:

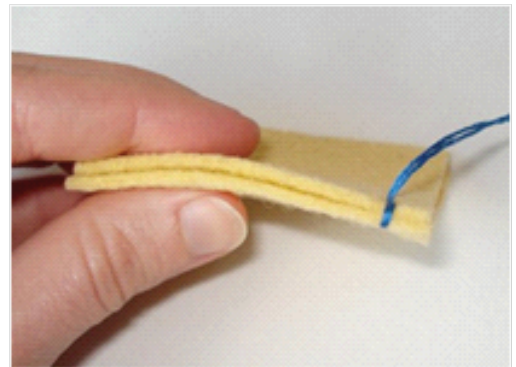
Begin the whip stitch by tying a knot in the end of your thread. Then poke your needle up through the top layer of fabric, about 4mm in, from between the two pieces.

This way the knot will be between the two pieces of fabric and will not be visible.



Step 2:

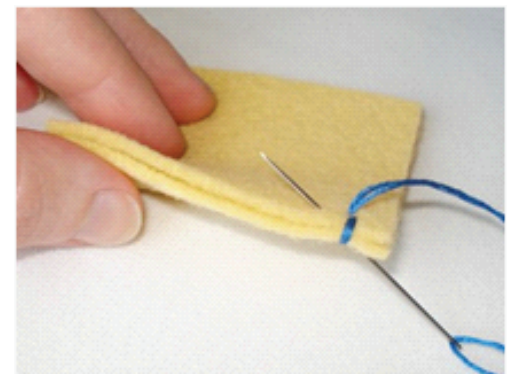
Next, poke the needle up through both layers of fabric so the needle and thread come up in almost the same place as in step 1. By doing this, the thread should be wrapped around the edges of the fabric in one neat stitch. It is important to pull the stitches so that they are snug, but not overly tight.



Step 3:

Once again, poke the needle up through both layers of fabric. Poke the needle through the same hole as before, so this next stitch will cover the first stitch. However, this time you will angle the needle so that it comes up about 4mm from the first stitch (as well as 4mm from the edge of the fabric).

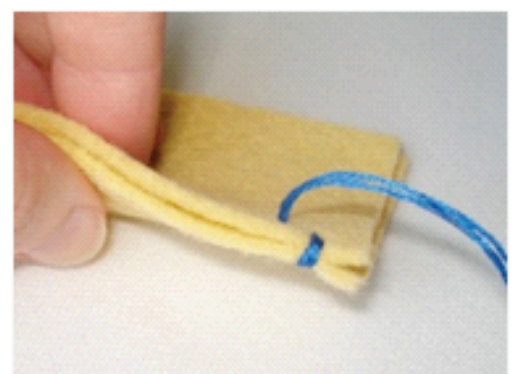
Pull this stitch tight, and you should have what still looks like one stitch, but the thread is coming out of the fabric next to it.



Step 4:

Now poke the needle up through the fabric, directly under where the thread is coming up. But again, angle the needle so that the end comes out next to this second stitch.

When you pull this stitch tight, it should be straight up and down, not angled. In others words, it should be parallel to the first stitch.





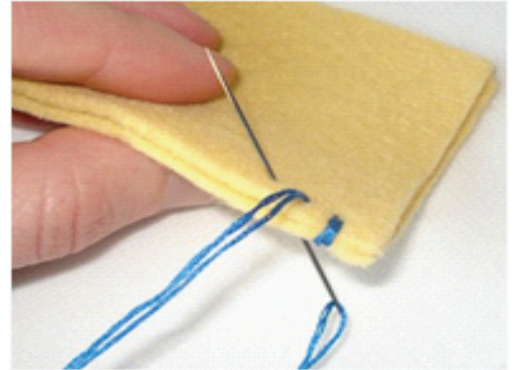
Sewing Techniques

Carefully study the sewing technique below so that you can master this skill in your project.

Step 5:

Continue this pattern of poking the needle through the two layers at an angle, coming up next to the previous stitch.

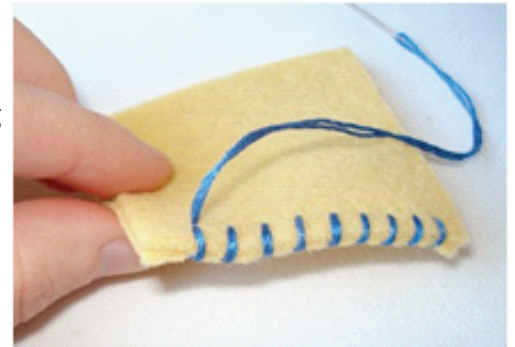
When you have reached the end of the section you want to stitch, or you need to start with a new piece of thread, make the final stitch come straight up, rather than angled off to the side.



Step 6:

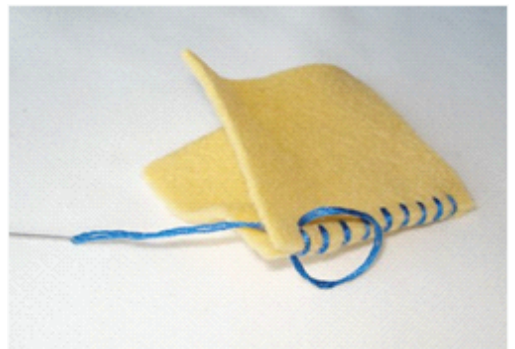
Then poke the needle through the bottom of this stitch again (making the stitch doubled) but only go through the bottom layer, so your thread is in between layers.

Basically you are trying to do the reverse of how you started the whip stitch, so you can make a knot in between the layers of fabric.



Step 7:

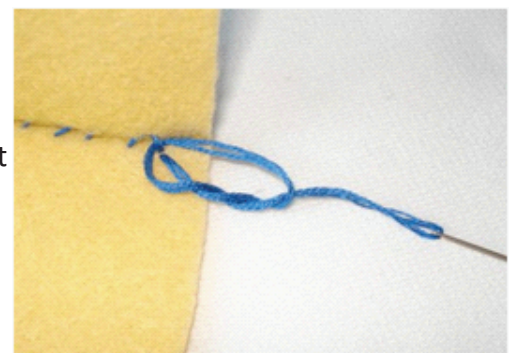
To make the knot, you may have to pull the two pieces of fabric apart a little. This will let you see the backs of the stitches you made.



Step 8:

Poke the needle through the backside of the last stitch you made. Then loop the needle through this loop of thread twice. Now as you pull the thread tight, this should create a knot that is tight against the seam. You now can cut your thread free.

Now you are done!

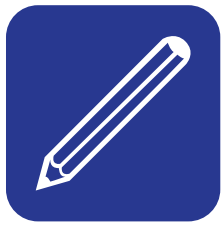




Idea Generation & Development

Use the space below to develop your ideas for your eco bag design. Remember to annotate your sketches!

A large, empty white rectangular box with rounded corners, intended for sketching ideas.A large, empty white rectangular box with rounded corners, intended for sketching ideas.A large, empty white rectangular box with rounded corners, intended for sketching ideas.A large, empty white rectangular box with rounded corners, intended for sketching ideas.



Final Design & Justification

Document your final chosen design by drawing it neatly in the space below and justify why you chose the design below.

I chose this design because:

I believe the hardest part of producing this design will be:



Finished Project Presentation

In the space below you need to insert a photo of your finished project.



Upload your work to instagram using #sactas

While you're there check out all the other fantastic student work on display!

* NB: Please respect this online forum in accordance with school policy.



Project Evaluation

Thinking critically about your project answer the questions below to evaluate the success of your project. Be honest!

Do I believe my project was successful? Why / Why Not?

What is one thing I learnt about tools during this project?

What is one thing I learnt about processes in this project?

How could I change my design to improve its aesthetics, function or quality?



Written Task

You will need to complete the written task for this unit which can be found on www.sactas.weebly.com

A large, empty rectangular area defined by a dashed grey border, intended for the student to complete their written task.



Year 7 Technology



Year 8 Technology



Your Practical work will be marked in the following 3 areas:



Stage 4 (Yr7 & Yr8) Practical: Marking Criteria

SPECIFICATIONS:	
Does it meet the design brief requirements and adhere to the specifications and limitations?	
DESIGN:	Is it a well-suited and developed design presenting a high level of functionality, challenge and originality?
EXECUTION:	Does it show accuracy & execution of practical skills using appropriate techniques and processes to a highly competent level?



Stage 4 (Yr7 & Yr8) Practical: Marking Rubric

Marks /60	Mark Descriptor
51-60	Demonstrates very high quality in all aspects of the project
41-50	Demonstrates high quality in most aspects of the project
31-40	Demonstrates substantial quality in most aspects of the project
21-30	Demonstrates limited quality in most aspects of the project
11-20	Demonstrates very limited quality with some incomplete work
1-10	Demonstrates basic quality with a majority of incomplete work
0	Non-submission of work



Stage 4 (Yr7 & Yr8) Written Task: Marking Rubric

Marks /20	Mark Descriptor
19-20	Demonstrates very high quality in all aspects of the written task
17-18	Demonstrates high quality in most aspects of the written task
14-16	Demonstrates substantial quality in most aspects of the written task
11-13	Demonstrates limited quality in most aspects of the written task
7-10	Demonstrates very limited quality with some incomplete work
1-6	Demonstrates basic quality with a majority of incomplete work
0	Non-submission of work



Stage 4 (Yr7 & Yr8) Folio: Marking Rubric

Marks /20	Mark Descriptor
19-20	Demonstrates very high quality in all aspects of the project folio
17-18	Demonstrates high quality in most aspects of the project folio
14-16	Demonstrates substantial quality in most aspects of the project folio
11-13	Demonstrates limited quality in most aspects of the project folio
7-10	Demonstrates very limited quality with some incomplete work
1-6	Demonstrates basic quality with a majority of incomplete work
0	Non-submission of work

Additional Comment:

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