



Sample assessment task	
Year level	3
Learning area	Technologies
Subject	Design and Technologies: Materials and technologies specialisations
Title of task	Come fly with me!
Task details	
Description of task	Students are to research and construct a kite using the most appropriate materials and produce a reflection on the success of their product.
Type of assessment	Formative and summative
Purpose of assessment	To assess students' appropriate material selection for constructing, the development of construction processes and design skills
Assessment strategy	Written work, student reflection, observational annotations and final product
Evidence to be collected	<ul style="list-style-type: none"> • Design drawing • Self-assessment • Final product
Suggested time	2–3 hour lessons 30 minutes for evaluation - 15 minutes before and 15 minutes after
Content description	
Content from the Western Australian Curriculum	<p><i>Knowledge and understanding</i></p> <p>Materials and technologies specialisations Suitability and safe practice when using materials, tools and equipment for a range of purposes</p> <p><i>Processes and production skills</i></p> <p>Investigating and Defining Create a sequence of steps to solve a given task</p> <p>Designing Develop and communicate ideas, using labelled drawings and appropriate technical terms</p> <p>Producing and implementing Select, and safely use, appropriate components with given equipment to make a solution</p> <p>Evaluating Use criteria to evaluate design processes and solutions developed</p> <p>Collaborating and managing Work independently, or collaboratively when required, to plan, safely create and communicate sequenced steps</p>
Connected curriculum	<p>Engineering principles and systems Forces, and the properties of materials, affect the behaviour of objects</p>

Task preparation	
Prior learning	<p>Students understand that different materials have different properties and are used to produce different products.</p> <p>Students are able to draw and label designs and can work collaboratively on a task.</p>
Assessment differentiation	<p>Teachers should differentiate their teaching and assessment to meet the specific learning needs of their students, based on their level of readiness to learn and their need to be challenged.</p> <p>Where appropriate, teachers may either scaffold or extend the scope of the assessment tasks.</p>
Assessment task	
Assessment conditions	In pairs, research, design, construct, test and evaluate a kite.
Resources	<ul style="list-style-type: none"> • Bamboo • Design books • Paper • Material • String • Adhering equipment • Other equipment and materials identified and readily available to construct kites

Instructions for teacher

As a whole class investigate the following aspects of kite designs:

- compare the designs of a variety of kites and the particular materials they are made from
- establish criteria for successful kites. Discuss with the class before they begin researching and constructing. Include materials, tools and equipment best suited for kite construction as well as how to join them. List the criteria on the board or poster and place prominently in the classroom for students to refer to during the construction phase.

Actual task instructions

- In pairs, explore design briefs and production proposals of a variety of kites with consideration to the criteria discussed as a class.
- With your partner, design a kite. Include the following in your design:
 - organise and implement a production process to your own specifications
 - select and obtain materials and equipment that are appropriate to *your* design
 - consider the best methods of construction, including joining materials.
- Complete 'What I expect will happen' in the evaluation sheet before you begin your kite construction.
- Construct the kite and test it.
- Complete 'What actually happened' in the evaluation sheet.

Any worksheets or scaffolding specific to the task

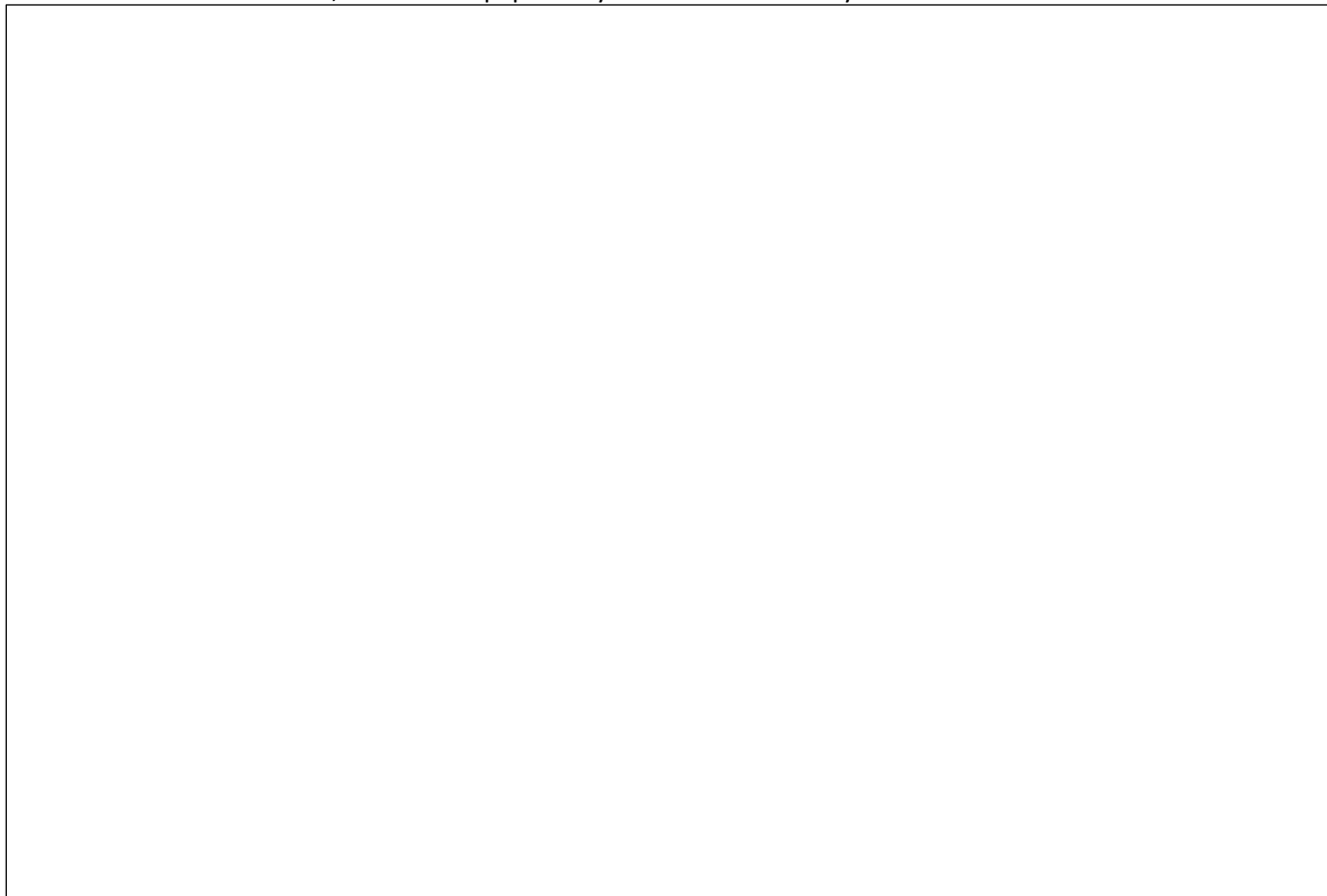
- Design sheet that includes:
 - drawn design
 - list of materials, tools and equipment
 - construction process, including how you will join the materials together.
- Evaluation – before and after.

Instructions to students

Design sheet

Design your kite. Include the following information:

- labelled drawing
- list of chosen materials, tools and equipment you will use to make your kite



Why did you choose the materials, tools and equipment to construct your kite? Justify why they are the most suitable for the given purpose of kite making.

How do you plan to construct your kite? What are the steps you need to take? Include joining methods – how will it stay together?

Criteria to evaluate the design

Complete the evaluation sheet before you start making your kite (after you have designed it) and again after you have made and tested your kite.

What I expect to happen with:	What actually happened with:
<i>Flight:</i>	<i>Flight:</i>
<i>Strength (e.g. materials used):</i>	<i>Strength (e.g. materials used):</i>
<i>Construction (e.g. how it will stay together)</i>	<i>Construction (e.g. how did it stay together)</i>
<i>Appearance (what it will look like):</i>	<i>Appearance (what it actually looks like):</i>
<i>Usability (how easy will it be to fly?):</i>	<i>Usability (is it easy to fly?):</i>
<i>Safe practice (what do you need to think about when using materials and equipment?):</i>	<i>Safe practice (did you think about all the safety aspects before starting?):</i>

Sample marking key

For each question, there is a criterion-referenced marking key, which shows the type of response expected in order for students to gain the full range of marks within each question.

Description	Marks
Materials and technologies specialisations: Justification initial criteria and end product	
Appropriate selection of materials used and construction processes in the construction of the kite. Student justifies choice or makes adjustments and explains the changes.	3
Appropriate selection of materials used and construction processes in the construction of the kite.	2
Required assistance to make a selection or made an inappropriate material choice for kite construction.	1
Subtotal	3
Description	Marks
Designing: Drawing of design	
Design/drawing is detailed and accurate and may include labelled materials and measurements. Student uses technical terms to explain the details.	3
Design/drawing is clear to follow and is labelled. Student may include some technical terms.	2
Design/drawing is limited in detail. It may not be labelled at all.	1
Subtotal	3
Description	Marks
Producing and implementing: Constructing the kite	
Student selects a range of materials, tools and equipment that complement the design ideas and construction processes.	3
Student selects appropriate materials, tools and equipment for construction to make a kite.	2
Student requires assistance to make satisfactory choices of materials and construction equipment.	1
Subtotal	3
Description	Marks
Evaluating: Predicting before and evaluating after	
Detailed initial prediction justifying expected outcomes. Evaluation is comprehensive and may include issues encountered and how to solve them by redesigning the kite.	3
Student states the facts – what might happen and then what happened, with little elaboration beyond this.	2
Incomplete and/or illogical reasons that may not reference the kite.	1
Subtotal	3
Total	12

Teacher checklist

Teacher checklist for student safety. Include as many rows as needed to include all students

- Did the student behave safely when using the materials, tools and equipment to make a kite?

Student Name	Safety?		Comments <i>If the student only partially meets safety aspects, qualify and clarify in the comments.</i>
	YES	NO	