



| Sample assessment task | |
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| Year level | 4 |
| Learning area | Technologies |
| Subject | Design and Technologies: Materials and technologies specialisations |
| Title of task | Recycled toys |
| Task details | |
| Description of task | Students will research toys and make a toy using recycled materials that is suitable for a child in Pre-primary. |
| Type of assessment | Formative |
| Purpose of assessment | To develop students' understandings of material selection and how products are created and have evolved for consumers |
| Assessment strategy | Practical assessment and student evaluation |
| Evidence to be collected | <ul style="list-style-type: none">• Design plan• Production plan• Student evaluation• Final product |
| Suggested time | 1–2 hour lessons |
| Content description | |
| Content from the Western Australian Curriculum | <p><i>Knowledge and understanding</i></p> <p>Technologies and society Ways products, services and environments are designed to meet community needs, including consideration of sustainability</p> <p>Materials and technologies specialisations Suitability and safe practice when using materials, systems and components for a range of purposes</p> <p><i>Processes and production skills</i></p> <p>Investigating and defining Define a sequence of steps to design a solution for a given task</p> <p>Designing Develop and communicate design ideas and decisions using annotated drawings and appropriate technical terms</p> <p>Producing and implementing Select, and safely use, appropriate components and equipment to make solutions</p> <p>Evaluating Use criteria to evaluate and justify simple design processes and solutions</p> |

| Task preparation | |
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| Prior learning | <p>Students have an understanding of toys for a specific audience that are age appropriate.</p> <p>Students understand how to evaluate their process and end product using given criteria.</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 | Individually complete the construction and evaluation sheet once the toy is complete. |
| Resources | Various websites giving examples of toys made from recycled materials that are age appropriate. |

Instructions for teacher

As a whole class, research different types of toys and the materials they are made of. Discuss the materials and why they are appropriate for their chosen toy, e.g. teddies are made from cloth so they are soft, rocking horses are made from wood so they are strong and can be sat on.

Brainstorm a list of possible recycled materials that could be used to construct their toys. Consider availability, safety and ease of use – can they use the materials in class to make their toy?

Examples of materials:

- old cloths (e.g. to make dolls, teddies)
- plastic bottles and lids (e.g. to make vehicles, robots)
- shells, coat-hangers (to make mobiles)

Task instructions

Students use the design sheet to draw and label a detailed design of their toy.

- Include a list of materials they think they are going to need/use.
- Make the toy.
- Complete the evaluation sheet. *(Before doing this, students may give completed toys to intended recipients to get feedback from them. This may include strength, engagement of the recipient to play with it.)*

Any worksheets or scaffolding specific to the task

- Design sheet which includes following information:
 - drawn design that is labelled
 - materials listed
 - method listed
 - explanation of choice
 - production plan.
- Evaluation sheet

Instructions to students

Design Sheet

- Draw your toy design and label it in detail, including the materials you use.
- Include a list of the materials you will use.
- List the method you will use to create your toy – what are the steps?

| List the materials you will use | Method for construction – what are the steps to make your toy? |
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Explain why you chose to make this toy. Comment on who it is for, age, like/dislike.

Production process

Develop a plan of how you will create your toy. Include the materials you are using and as much information as possible to assist you.

Steps to produce your toy:

Evaluation Sheet

Answer yes or no to the following questions and give reasons for your answers.

| Question | Yes | No | Comment – reasons for your answers |
|--|-----|----|------------------------------------|
| Did you follow your design when you made your toy? | | | <hr/> <hr/> <hr/> <hr/> |
| Did you use the materials you had planned to use? | | | <hr/> <hr/> <hr/> <hr/> |
| Was your toy strong? | | | <hr/> <hr/> <hr/> <hr/> |
| Did your toy meet the needs of your target audience? Explain why or why not. | | | <hr/> <hr/> <hr/> <hr/> |
| What improvements could you make to your toy? | | | <hr/> <hr/> <hr/> <hr/> |
| What safety aspects have you considered? | | | <hr/> <hr/> <hr/> <hr/> |
| Why are these safety considerations important? | | | <hr/> <hr/> <hr/> <hr/> |

| Sample marking key | |
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| Description | Marks |
| Technologies and Society | |
| Demonstrates an extensive understanding when making a product for a specific audience (e.g. age appropriate choice of toy) and justifies recycled materials used. | 5 |
| Demonstrates a high level of understanding when making a product for a specific audience (e.g. no small pieces for babies) and explains the recycled materials used. | 4 |
| Has an accurate understanding of making a product for a specific audience and the toy matches its purpose. Uses recycled materials. | 3 |
| Has limited understanding of connecting audience to purpose and requires guidance to select a toy to construct and advice on material use. | 2 |
| Requires assistance to select a toy to make for a specific audience. | 1 |
| Subtotal | 5 |
| Description | Marks |
| Materials and Technologies Specialisations | |
| Independently selects a variety of appropriate materials to make a toy for a young child and justifies materials selected to match their use. Justifies safety considerations in detail. | 5 |
| Independently selects materials appropriate to the construction of the toy and accurately explains the choices made. Explains safety considerations clearly. | 4 |
| Selects materials to make a toy that are appropriate to complete the task. Makes reference to the choice of materials. Considers the safety aspects and gives a simple explanation. | 3 |
| Demonstrates limited understanding when selecting appropriate materials for a specific purpose and requires guidance. Requires assistance to describe 1 or 2 safety aspects. | 2 |
| Requires assistance to select appropriate materials to make a toy. Does not consider safety when making the toy. | 1 |
| Subtotal | 5 |
| Description | Marks |
| Investigating and Defining | |
| Integrates understanding about designing and applies this to the toy design. Demonstrates thought and insight into the design of the toy for intended recipient, e.g. may gather information prior to designing such as likes and dislikes. | 5 |
| Applies learning and consistently demonstrates an understanding of design processes. Toy reflects accurate detail in the design. | 4 |
| Applies learning accurately and demonstrates developing a sequence of steps by drawing a labelled diagram of intended toy. | 3 |
| Shows inaccuracies in drawn design and has a lack of detail in the labelled toy. | 2 |
| Show little accuracy in the task at this level. Design may be incomplete and lacks any detail, e.g. may just be a drawn toy. | 1 |
| Subtotal | 5 |

| Description | Mark |
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| Designing | |
| Demonstrates extensive knowledge and understanding of design and design choice. Uses a range of appropriate technical terms to explain choices. | 5 |
| Demonstrates a high level of competence when choosing a design which is reflected in the drawing of the toy. Uses appropriate technical terms to explain choices. | 4 |
| Able to accurately draw and label a design for a toy. Uses some technical terms to explain choices. | 3 |
| Demonstrates a limited level of understanding and has inaccuracies in labelled drawing. | 2 |
| Demonstrates a very limited understanding of designing and does not communicate ideas clearly. | 1 |
| Subtotal | 5 |
| Description | Mark |
| Evaluating | |
| Comprehensively acknowledges that the initial design needs to match the end outcome and accurately explains any alterations made, justifying why they were made. | 5 |
| Understands the toy must match the design and can clarify any changes made and give reasons for the changes. | 4 |
| Follows design accurately and understands the end program should match the initial design. Lists basic changes made. | 3 |
| End product may not match design. Attempts to give basic reasons for changes | 2 |
| End product does not match the design and no explanation is given for why OR the explanation is not relevant to the task. | 1 |
| Subtotal | 5 |
| Total | 25 |