



Schemes of work

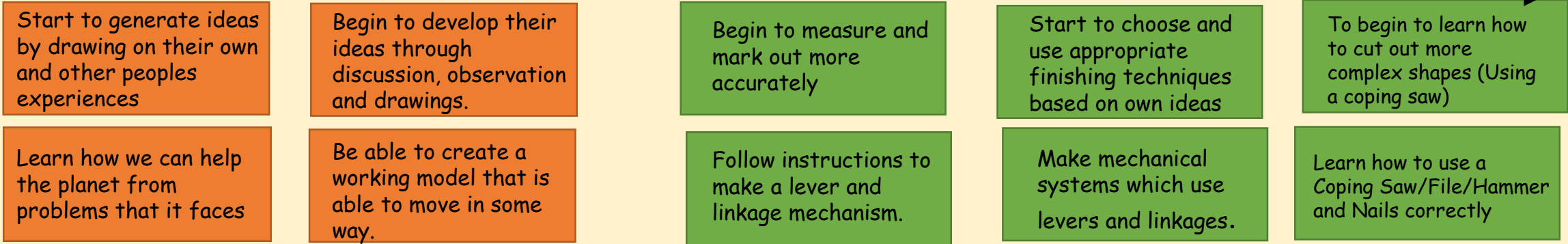
Year: Year 8

Subject: RMT

Mrs Rigler

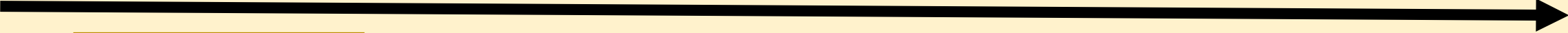


Rotation 1: Message Board (The Environment)



| Progress | Designing and Modelling | Making |
|--------------------------------|--|---|
| Oakwood Learning Stage 1 and 2 | <p>I am able to identify with support some relevant problems facing the earth today. With support I can describe some of the problems that society create whilst living on the planet. I am starting to talk about how I could develop my design to make it better. With support I am able to make a working model of a Linkage or mechanism.</p> | <p>With support I am able to mark out and cut sheet material and I am able to measure and cut a range of materials to a specific length with some accuracy. With support I am beginning to follow a curved line using a more complex saw. With support I am beginning to use more complex finishing techniques (For example filing)</p> |
| Oakwood Learning Stage 3 and 4 | <p>I am able to identify and describe a range of problems facing the earth today. I can describe some of problems that society create whilst living on the planet and how this may affect the earth. I can describe through discussion how I could change my design to make it better. With some support I am able to make a model of a Linkage or Lever that moves in some way.</p> | <p>With support I am beginning to mark out and cut sheet material with some accuracy and I am able to measure and cut some materials to a specific length with accuracy. With some support I am starting to cut out more complexed shaped using various saws. With some support I am starting to use more complex finishing techniques (For example cross filing and draw filing)</p> |
| Oakwood Learning Stage 5 and 6 | <p>I am able to independently identify a range of problems that society creates whilst living on our planet and how this affects the earth and why. I can use this information to create some design ideas but then also use observations of the information gathered to help develop my designs. I understand that I need to create different designs to satisfy different users. I am able to make a model of a Linkage or Lever that moves in some way.</p> | <p>I am able to with some support mark out and cut sheet material with some accuracy and I am able to measure and cut a range of materials to a specific length with accuracy. With minimal support I am able to cut out a more complex shaped using various saws. With minimal support I am starting to use more complex finishing techniques (For example cross filing and draw filing)</p> |

Rotation 1: Message Board



Be able to explain the difference between a lever and a linkage.

Start to understand whether products can be recycled or reused

Evaluate products for both their purpose and appearance

Say how they will make a product suitable for their intended user.

| Progress | Technical Knowledge | Evaluating |
|----------|---------------------|------------|
|----------|---------------------|------------|

Oakwood Learning Stage 1 and 2

I can with support identify some linkages and levers
 I am beginning to identify the differences between some products that can be recycled and ones that cannot. I am starting to identify parts of products that can be reused.
 With support I can name some common levers and their uses. With support I can identify some of the 6 R's and identify what some of them mean.

With support I can reflect on the design and make of my product and identify some improvements which may include its purpose and appearance and function. With some support I am able to draw on other peoples/peers opinions to help me improve my work.

Oakwood Learning Stage 3 and 4

I can identify a range of levers and linkages. I am starting to look at the differences between products that can and cannot be recycled and the reasons why we should recycle. I can describe parts of a product and which parts may be re used to make another product.
 With some support I can identify some common levers and their uses. With some support I can identify the 6'R's and describe what some of them are.

With support I can reflect on my design and make of my products and describe some improvements which includes talking about the products purpose appearance and function. I can describe how I made my product suitable for the intended user and if it has met the design criteria. With some support I am able to create a questionnaire with relevant questions to gather other peoples/opinions on my final Product. I can display my findings in a chart.

Oakwood Learning Stage 5 and 6

I describe the difference between Levers and Linkages. I can describe the differences between products to be recycled and not and why we recycle.
 I can break down a product into parts and explain which parts could be reused to make something else.
 With minimal support I can name some common levers and their uses. With minimal support I can name the 6 R's and

I can regularly reflect upon my own work, and use comparisons with the work of others (pupils and intended user) to identify how to improve my product.
 With minimal support I am able to create a questionnaire with relevant questions to gather other peoples/opinions on my final Product. I can display my findings in a Pie or Bar chart



Rotation 2: Ball bearing Game



| | | | | |
|--|--|---|---|---|
| To identify what tools and materials I will use to make my design. | Talk about a familiar product similar to what I am going to make | Begin to measure and mark out more accurately | Select from a wider range of tools when creating their product. | Use finishing techniques to strengthen and improve the appearance of my product |
| I can generate a range of design ideas for my product | To use Existing products to help inspire my ideas | Learn how to use a screwdriver correctly to attach my lid | Develop my confidence when using a Hammer and Drill. | Start to assemble and join a larger range of materials to make a product. |

| Progress | Designing and Modelling | Making |
|----------|-------------------------|--------|
|----------|-------------------------|--------|

| | | |
|--------------------------------|---|---|
| Oakwood Learning Stage 1 and 2 | <p>With support I can find relevant images related to my project and can talk about one of the familiar products. With support I can create a small range of design ideas drawing on Existing products to help inspire my ideas. With support I am able to identify what I am going to make and some of the materials and tools I will use to make it. With support I am able to create an exploded/orthographic drawing of my design</p> | <p>With support I am starting to assemble, join and combine a range of materials and components in order to make a product. With support I am able to measure and mark out and file (with some adjustments) my Lap joints for the frame of my game. With support I am able to select and use a wider range of tools and talk about their choice. With some support I can identify some types of finishes and advantages and disadvantages of one of them.</p> |
| Oakwood Learning Stage 3 and 4 | <p>With some support I can find relevant images related to my project and talk about one of the familiar products and what it is used for. With some support I can create a range of design ideas drawing on Existing product to help inspire my ideas. With some support I am able to describe what I am going to make and the materials and tools I am going to use and a reason for using one of them. With some support I am able to create an exploded/orthographic drawing of my design with labels.</p> | <p>With some support I am starting to assemble, join and combine a range of materials and components in order to make a product. With some support I am able to measure and mark out and file my lap joints correctly for the frame of my game. With some support I am able to select and use a wider range of tools and describe the reasons for my choice. With some support I can identify a range of finishes and some advantages and disadvantages of some of them.</p> |
| Oakwood Learning Stage 5 and 6 | <p>I can independently find a range of relevant images for my project and talk about these familiar products and I like or dislike about the products. With minimal support I can create a range of creative design ideas drawing on Existing product to help inspire my ideas. With minimal support I can explain what I am going to make and</p> | <p>With minimal support I am starting to confidently assemble, join and combine a wide range of materials and components in order to make a product. With minimal support I am able to accurately measure and mark out and file my Lap joints for the frame of my game. With minimal support I am able to select and use a wide range of tools</p> |

Rotation 2: Ball bearing Game

| I can with support draw my product in 3D using 2 Point perspective. | I am starting to identify some types of wood joints | Start to make labelled drawings from different views showing specific features | Begin to evaluate my product as it is being made. | Start to test my product to see if it works as intended. |
|---|---|--|---|--|
| Progress | Technical Knowledge | | Evaluating | |
| Oakwood Learning Stage 1 and 2 | <p>With support use the 2 point perspective drawing technique to draw out my design in 3Dimensions.</p> <p>With support identify some types of wood joints and respond to stimuli as to which ones are weaker and stronger.</p> <p>With support/writing frame I can create a basic working drawing with some measurements of parts of my Ball bearing Game.</p> | | <p>With support I am beginning to evaluate my product as it is being made, identifying strengths and possible changes I might make.</p> <p>With support I can test my product to see if it works as intended.</p> | |
| Oakwood Learning Stage 3 and 4 | <p>With some support use the 2 point perspective drawing technique to draw out my design in 3Dimensions.</p> <p>With some support identify some types of wood joints and describe what they may be used for and which ones are weak and which are stronger.</p> <p>With minimal support I can identify/describe some types of permanent and temporary fixings and talk about where on a product they may be used.</p> <p>With support I can create a basic working drawing with all parts of my Ball bearing Game and measurements of most of the parts.</p> | | <p>With some support start to evaluate my product as it is being made, identifying strengths and possible changes I might make.</p> <p>With growing confidence I can talk about my ideas/final product describing what I like and dislike about them. I am beginning to independently check my work/test it out to see if my product works as intended.</p> | |
| Oakwood Learning Stage 5 and 6 | <p>With minimal support/Independently I can use the 2 Point perspective drawing technique to draw out my design in 3Dimensions.</p> <p>With minimal support describe some types of wood joints and explain what they would be used for, identify products they could be used in and explain which ones are weak and which are stronger.</p> <p>With minimal support I can identify/describe a range of permanent and temporary fixings and explain where on a product they may be used.</p> <p>With some support I can create a working drawing of all parts of my Ball bearing Game with accurate measurements of each part.</p> | | <p>With minimal support evaluate my product as it is being made, identifying strengths and possible changes I might make.</p> <p>With confidence I can talk about my ideas/final product saying what I like and dislike about them. I am beginning to independently carry out appropriate tests to see if my product functions properly.</p> | |