

D&T Yr8 Home Learning Task Help and Explanation

Submission w/c:
16th October 2017



1 RESEARCH
1 CREATIVE
1 LITERACY

You choose
the task **IES**



The more effort
you put in the
more merits
you will receive....

Task = To develop an understanding of renewable energy sources and to practice technical drawing skills.
Complete – 1 x Research task, 1 x Creative task, 1 x Literacy task.
Choose your task from the three categories ; 'I', 'E', 'S'. Challenge yourself!
You can mix and match the tasks that you complete from the I E S categories.
But you must have one from Research, one from Creative and one from Literacy.
You can receive **up to 5 merits** depending on how much effort you put in!

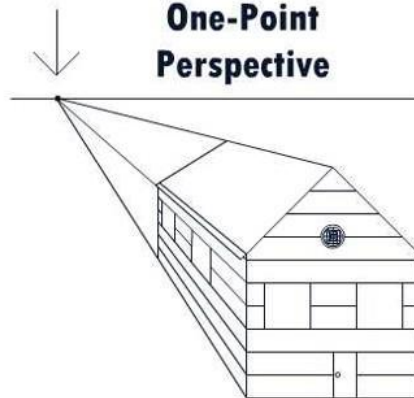
Renewable Energy

- Wind
- Solar
- Tidal
- Hydro-electrical
- Biomass

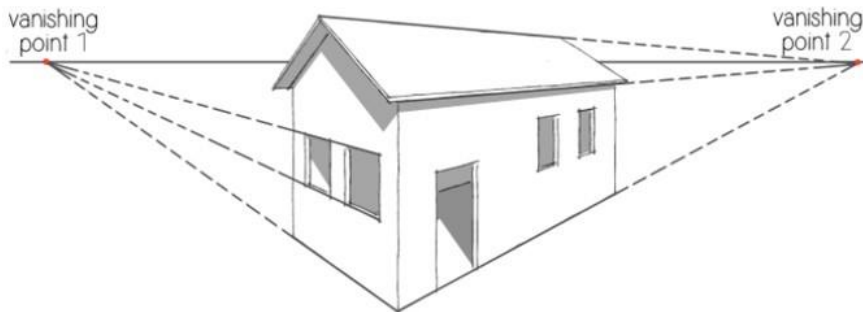
Isometric Projection



One-Point Perspective



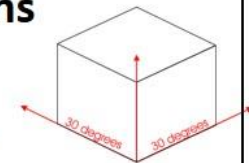
Two-point perspective



Keyword definitions

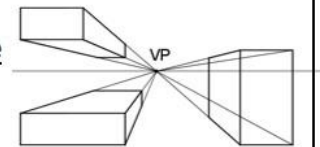
Isometric Projection

Uses vertical lines and lines drawn at 30° to horizontal.
You can use Isometric paper from the DT room.



One-point perspective

All lines lead to the same vanishing point.



Two-point perspective

Uses two vanishing points, connected by a horizontal line (the horizon line).



Due in _____ Name _____

D&T Yr8 Home Learning Task Renewable Energy

Research = 45 mins
Creative = 45 hour
Literacy = 30 mins



RESEARCH

Research **how power is generated** from wind, solar, tidal, hydro-electrical and biomass. Present your research in the form of an **informative poster**. Include pictures for each and an explanation of how power is generated from each of the 5 energy sources. Include **diagrams or drawings** to help explanation. **Explain the advantages and disadvantages for each.**

Minimum 1 x A4. Max 2 x A4 or 1 x A3.

Research **how power is generated** from wind, solar, tidal, hydro-electrical and biomass. Present your research in the form of an **informative poster**. Include pictures for each and a brief explanation of how power is generated from each of the 5 renewable energy sources.

Explain the advantages and disadvantages for each.

Minimum 1 x A4. Max 2 x A4 or 1 x A3.

Research **how power is generated** from wind, solar, tidal, hydro-electrical and biomass.

Present your research in the form of an **informative poster**. Make sure each one is **titled and explained and includes a picture**.

For each energy source research an advantage and a disadvantage to help you in the literacy section.

1 x A4 sheet



CREATIVE

Design a house/building that incorporates **3 or more forms of renewable energy**.

Draw in pencil and in **1 or 2 point perspective**. **Colour** in pencil crayon. **Annotate** in pen to explain your forms of renewable energy and what their purpose is within your house/building.

Design a house/building that incorporates **3 forms of renewable energy**.

Draw in pencil and in 3D (**isometric projection**). **Colour** in pencil crayon. **Annotate** in pen to explain your 2 forms of renewable energy and what their purpose is within your house/building.

Draw a house/building that incorporates **2 forms of renewable energy**.

Draw in pencil. **Colour** in pencil crayon. **Annotate** in pen to explain your 2 forms of renewable energy and what their purpose is within your house/building.



LITERACY

Based on your research, write a **mini-essay** looking at the arguments **for and against** the selection of renewable energy. Discuss both sides of the argument and come to your own conclusion. **400 words minimum.**

Based on your research, write a **mini-essay** looking at the arguments **for and against** the selection of renewable energy. Discuss both sides of the argument and come your own conclusion. **200 words minimum.**

Based on your research, use the titles 'advantages' and 'disadvantages' on an A4 page and list as many arguments **for and against the selection of renewable energy**.

1 x A4 page.

I

E

S