



WODENSBOROUGH
ORMISTON ACADEMY

KS3 HOME LEARNING PACK

EASTER 2020

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Science Task

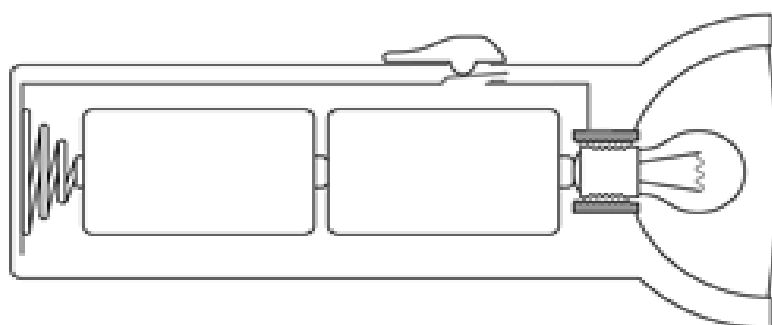
7J Task Sheet (LWT-2)

How does a torch work?

A torch has a circuit in it.

Use the diagram of a torch to describe and explain your ideas about energy and electricity.

Use the level ladder below to help you achieve your target.



Task:

- Use the diagram above to help you explain how the torch works.
- Draw a circuit diagram of the torch.
- Use a model of an electric circuit to explain how the circuit works.

Key words:

battery (cell), bulb, conductor, current, insulator, metal, plastic, switch, voltage, wire

Level ladder:

What is your target level? Use the level ladder to help you reach it:

To get level	You might have:
WT	<ul style="list-style-type: none">• Drawn a simple circuit diagram of the torch.• Shown where the electricity comes from.• Stated simply how the torch works.
1	<ul style="list-style-type: none">• Drawn a circuit diagram using standard circuit symbols.• Stated the job of the cells, wires, bulb and switch.• Identified which materials in the torch are conductors and insulators.
2	<ul style="list-style-type: none">• Drawn a circuit diagram using standard circuit symbols.• Described the job of the cells, wires, bulb and switch.• Described materials in the torch as conductors and insulators.

7D Task Sheet (LWT-2)

Why do the Cheeky Girls look slightly different?

The Cheeky Girls are identical twins. They were both born on 31st October 1982.

Both the Cheeky Girls look very similar, although there are some differences. An internet user has posted a question on the Cheeky Girls website forum:



CheekyBoi: The Cheeky Girls are supposed to be IDENTICAL twins, but I can C that Monica is taller than Gabriella and their faces look slightly different. Not that IDENTICAL are u! R U just sisters that dress the same?

Task:

Write a reply to *CheekyBoi*. Explain why the Cheeky Girls look so alike.

Make a list of characteristics the Cheeky Girls might have that are different and explain why these differences may occur.

Start your reply: Dear *CheekyBoi*, I have been doing a topic on Variation in Science at school. The reasons there are some differences between the Cheeky Girls are...

Key words:

ability to sing, eye colour, hair colour, height, mass, nose shape

Level ladder:

What is your target level? Use the level ladder to help you reach it:

To get level	You might have:
WT	<ul style="list-style-type: none">• Stated simply why the Cheeky Girls look similar.• Listed some characteristics that will be the same and some that might be different (use the key words list).
1	<ul style="list-style-type: none">• Described two characteristics which are inherited, two which are environmental and two which are caused by both (use the key words list).• Predicted which characteristics could come from their parents.
2	<ul style="list-style-type: none">• Described two characteristics which are inherited, two which are environmental and two which are caused by both (use the key words list).• Explained why certain characteristics are inherited and others are caused by the environment.• Predicted and explained which characteristics could come from their parents.

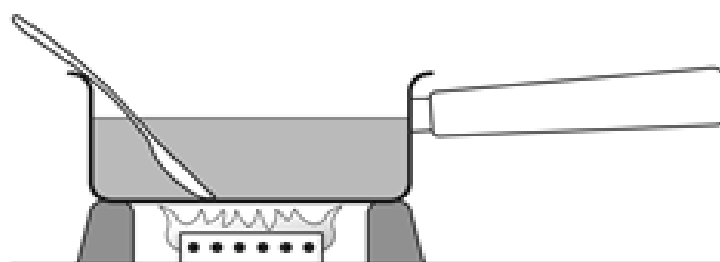
8I Task Sheet (L2-4)

Heat in the kitchen

During a Food Technology lesson, some students were wondering why the metal spoon gets hot, but the wooden handle of the saucepan does not. Use your knowledge and understanding to explain how the energy is transferred from the cooker to the end of the wooden spoon.

Task:

Show how the energy from the gas ring is transferred to the end of the spoon. Describe how the energy is transferred. Use particle diagrams to show what is happening.



Key words:

conduction, conductor, convection, energy transfer, evaporation, heating, insulator, metal, radiation, water, wood

Level ladder:

+ What is your target level? Use the level ladder to help you reach it:

To get level	You might have:
2	<ul style="list-style-type: none">• Drawn the saucepan and spoon.• Labelled the metal, wood and water.• Drawn arrows to show how heat travels from the gas ring.• Indicated the parts which will get hot and the parts that will not.
3	<ul style="list-style-type: none">• Drawn or used a diagram of the saucepan and spoon.• Used the key words metal, wood, water, insulator, conductor, conduction, convection and radiation to label the diagram.• Drawn arrows to show heat energy transfers from the gas ring to the spoon handle.• Identified some energy transfers.
4	<ul style="list-style-type: none">• Drawn or used a diagram of the saucepan and spoon.• Used the key words metal, wood, water, insulator and conductor to label the diagram.• Drawn arrows to show heat energy transfers from the gas ring to the spoon handle.• Stated why energy is transferred from the hob to the spoon.• Identified energy transfers by conduction, convection and radiation.• Used a simple particle diagram to explain conduction.

8C Task Sheet (L2-4)

The dodgy barbeque

At her birthday garden party, Chloe's dad cooked beef burgers on a barbeque for the guests. Everybody was very hungry and so Chloe's dad cooked the burgers quickly. They were burnt on the outside. After a couple of mouthfuls, a few guests complained that their burgers were cold in the middle, so Chloe's dad put them back on the barbeque to heat them through. A few hours later, some of the guests had bad stomach pains and a few vomited. The next day, many of the guests were being sick and had diarrhoea.

Task: Use the information above to explain why the guests had food poisoning and the body's response to the infection.

You can do this either by:

- drawing a cartoon strip to show the stages of infection;
- writing an exciting story to show how the infection takes hold and is defeated.

Make sure you include:

1. How bacteria can enter the body.
2. Which barriers the bacteria must overcome when entering the body.
3. How the bacteria reproduce in the digestive system.
4. What the body can do to fight the infection.
5. How the body can prepare itself for a future infection from the same bacteria.

Food poisoning fact file:

Food poisoning can be caused by bacteria called *Salmonella*.

A small number of the bacteria on meat can cause food poisoning. These bacteria enter the body and reproduce by dividing in the same way as cells in the body. Each bacterium can divide every 20 minutes.

When it enters the body, it reacts with chemicals in the digestive system and causes food poisoning.

Key words: antibodies, bacterium (bacteria), food poisoning, illness, immune, infection, small intestine, stomach, stomach acid, white blood cells

• **Level ladder:** What is your target level? Use the level ladder to help you reach it:

To get level	You might have:
2	<ul style="list-style-type: none"> • Stated simply why the guests got ill. • Shown how the bacteria got into their bodies. • Suggested how to avoid food poisoning.
3	<ul style="list-style-type: none"> • Described how the bacteria got into the guests' bodies. • Described how the body defends itself from the bacteria entering. • Described simply where and how the bacteria reproduce. • Described simply how the body reacts when it is infected. • Stated ways to prevent food poisoning.
4	<ul style="list-style-type: none"> • Explained simply why the guests got food poisoning. • Described the body's defences against the bacteria. • Explained why it takes a few hours before a person feels ill. • Described how the body fights the infection. • Explained how food poisoning can be prevented.

Maths Task

Order of Operations

Section A: Calculate

1) $7 + 8 \times 3$	2) $20 - 4 \times 2$	3) $17 + 3 \times 6$	4) $23 - 18 \div 3$
5) $7 \times 3 - 2 \times 4$	6) $3 \times 6 + 8 \times 2$	7) $8 + 3 \times 2 - 4$	5) $14 \div 2 - 10 \div 5$

Section B: Work out

1) $(3 + 2) \times 4$	2) $3 \times (2 + 6)$	3) $(3 - 2) \times 5$
4) $12 \div (9 - 6)$	5) $(5 + 7) \div 3$	6) $(10 - 6) \times 4$
7) $15 \div 5 - 3$	8) $5 - 2^2 \times 2$	9) $(2 + 5) \times 2^2$
10) $6 - 3 \times 2^3$	11) $10^2 - 5 \times 2$	12) $(8 - 4) \times 3^2$

Section C: Match each question with the correct.

Question	Answer A	Answer B
$2 + 3^2 \times 4$	38	100
$(12 - 3^2) \times 4$	12	324
$4 \times (2 + 3)^2$	400	100

$22 - 2 \times (3^2 + 2)$	0	220
$5 \times 6 - 3^2 \times 2$	1458	12

Section D: Extension

You will need to do this on paper.

Use each of the numbers 2, 3, 7 and 8 and brackets () and the signs +, -, \times , \div to make each of the numbers from 20 to 50. You can use each number just once in each calculation.

Algebra – simplify the expressions

Section 1

$$y + y + y + y + y$$

$$s + s + s$$

$$p + p - p - p$$

$$3y + 2y$$

$$9k + 5k$$

$$10y + 3y - 5y$$

$$20t - 14t$$

$$8k - 8k$$

$$y^2 + y^2$$

Section 3

$$3a + 2b + 4a + b$$

$$7y + 5y + 2h + 2h$$

$$7m + 7p + 8m + p + 2p$$

$$8 + 3w - w - 3$$

$$6m - 2s + 11s + m$$

$$2a + 3b - 2 + a + 3b + 4$$

$$7p - 2p - 2q - q + 3r + 4r$$

Section 2

$$4u - 6u$$

$$2y - 9y$$

$$-3g - 2g$$

$$-4f + 9f$$

$$-m - 7m$$

$$5y^2 - 7y^2$$

$$6a^2 + 2a^2 - 9a^2$$

$$ab + ab + ab$$

Section 4

$$3y^2 + 4ab + 7y^2 + ab$$

$$9x^2 - 2x - 11x^2 + 5x$$

$$7ac - 3ab + 9ab - 7ac$$

Section 5

A square has a side length of $3x - 1$

Find an expression for the perimeter and area of the square

Section 6

Write as many expressions as you can that involve indices and are equal to 8.

Write as many expressions as you can that involve indices and are equal to x^2 .

English Task

Students have been lucky enough to be invited to enter three Young Writer competitions, with prizes to be won and winning entries published into a collection of story and poetry anthologies.

Below, you will find the required tasks and information on how to complete each entry.

Missing – write your own thrilling mini saga about the given theme. Tension and suspense should have your reader's gripped! However, your story can only be **one-hundred words** long. Ideas are included on the entry form to help you create an engaging piece of writing.

Spine Chillers – use tension, suspense and atmosphere to grip the reader. An example story is on the entry form to help you with ideas. Like the Missing story, you only have **one hundred words** to wow your reader.

Through Their Eyes – write a poem about anything you like. There is no limit! Find tasks on the entry form to help you create ideas.



SOS Sagas: Missing

11-18 Years

Grip your students with creative writing as they write their own thrilling mini-saga. Tension and suspense will have their writing leaping off the page!



Through Their Eyes

11-18 Years

Create a buzz around poetry writing in your school with our inspirational postcards. From world leaders and influencers to being a teen and the animal kingdom, there's something to engage all students.



Spine Chillers 2020

11-18 Years

Spine-Chillers is a fantastic way to get your students writing in this way by using tension, suspense and atmosphere!

IDEAS

PIECE
 SOCK
 PERSON
 LINK
 AN EXAM
 PART OF YOURSELF
 SOUL
 EMOTIONS
 KEY OR LOCK
 A SENSE
 SLEEP
 TIME
 MEMORY
 AWOL
 EXTINCT
 PRISONER
 DISAPPEARANCE
 EVERYTHING!
 AEROPLANE
 ABDUCTION
 EMPTY GRAVE
 HEIRLOOM
 GOVERNMENT
 LACK OF
 SOMETHING...
 PARENTS OR
 TEACHER
 TOY
 PET
 LOST IN...
 AN APPOINTMENT
 TRAIN
 PLANET OR STAR
 LOCATION
 UNKNOWN

SOS SAGAS

MISSING

OPTIONAL STORY STARTERS

YOU CAN USE THESE TO START OR INSPIRE YOUR WORK!

They'll never find me...
 The ransom note arrived...
 The money was gone...
 Part of me was missing...
 Why couldn't I remember?
 The place was empty...
 I couldn't believe I'd missed it...
 Missing, presumed dead...

MISSING

EXAMPLE MINI SAGA

I watched the parents' worried faces as they pleaded for new information, the policeman gently stroking the mother's shoulder; the only comfort he could offer. Their glassy eyes stared into the camera as they croaked a name. Had one not have known better, I might have believed their false heartache; their only daughter missing. The daughter they'd neglected for her entire life. The daughter that sat in her secluded cottage listening to their pathetic pleas. They croaked her name again. My name. You see, I was missing, and I would ensure I would never be found. They'd never find me.

STUDENT ENTRY FORM

(Please write in BLOCK CAPITALS)

Name:

Surname:

Class: Age:

Teacher's Name:

School Name:

Title of Your Mini Saga:

Young Writers' This form may be photocopied.
 Email info@youngwriters.co.uk Web www.youngwriters.co.uk Tel 01733 890066
 Young Writers, Remus House, Coltsfoot Drive, Peterborough, Cambridgeshire, PE2 9BF

(Title isn't included in 100-word limit!)

GOLDEN RULES OF MINI SAGA WRITING

1. Be original. You can be inspired by other stories, but add a twist and make it your own.
2. Keep to the 100-word limit - make every word count.
3. Include a beginning, middle and an end.

- ### GOLDEN RULES OF MINI SAGA WRITING
1. Be original. You can be inspired by other stories, but add a twist and make it your own.
 2. Keep to the 100-word limit - make every word count.
 3. Include a beginning, middle and an end.

[illegible][illegible]

Details are required for competition purposes only and will not be passed on to any third parties.
Young Writers is an imprint of 'Banana Ltd' VAT No. 102781343 Reg No. 05368980 | Full competition T&Cs are available on our website.

SPINE-CHILLERS

WHAT LURKS IN YOUR IMAGINATION?

EXAMPLE STORY

THE RAMBLER

Fog was creeping in, I wouldn't make it back before dark. I saw an old church. I'll wait there and call Tom, I thought. Fog weaved around weather-beaten tombs. I shivered. I crept between crumbling gravestones, heading for the church. The door latch was rusty but unlocked. I entered and shut the door behind me. 'Hello?' No answer. I called Tom. 'I'll be there in 20, Liz!' he said as I sat on a dusty pew. Moonlight cast dancing shadows through stained glass windows. Bang! 'Tom?' The shadows, still moving, grew bigger. A cold hand touched my shoulder. 'Tom?' ...



CAN YOU WRITE A SPINE-CHILLING SAGA?

Use atmosphere, tension and suspense to grip the reader. But, there's an added challenge, can you write your story using up to **100 words**?

Why not view the Spine-Chillers video online to help you with ideas?
www.youngwriters.co.uk/competitions/spine-chillers

STUDENT ENTRY FORM

(PLEASE WRITE IN BLOCK CAPITALS)

Name: Surname:

Class: Age:

School Name:

Teachers Name:

Title of Mini Saga:

This form may be photocopied.
 Email info@youngwriters.co.uk Web www.youngwriters.co.uk Tel 01733 890066

[illegible]

THROUGH THEIR EYES

**COMPLETE THIS FORM AND WRITE YOUR ENTRY ON THE BACK
OR ATTACH THIS FORM TO YOUR ENTRY, THANK YOU!**

Name: Surname: Age:

Class: Teacher's Name:

School Name:

Poem Title:

PLANNING SHEET

Make some notes here to help focus your writing!

Theme:

Idea:

Whose point of view are you writing from?:

Write 3 words to describe your person

1: 2: 3:

What key points do you want to raise or tackle in your poem?

What tone will you use?
e.g. sad, ironic, joking, aggressive, happy, etc.

What type of poem will you write?
e.g. riddle, free verse, haikus etc


What poetic techniques will you use?
e.g. imagery, personification, rhyming couplets etc.

HAND IN TO YOUR TEACHER BY

Details required for competition purposes only. Full competition T&Cs can be found at www.youngwriters.co.uk

KS3 Home Learning Task


Thematic Task - The world around us



GOLD PLUS!


Write a newspaper article about one of your choices

Include specific, accurate information, with good English. You could include images and/or quotes. Have a look at a newspaper for some inspiration!



Imagine you are going to teach about one of your choices. Come up with a suitable starter activity for a lesson on this choice.


Create a recap task, game or warm up for the class that could start a lesson off.



GOLD


Create a leaflet about one of your choices.

Use key terms and images to make it informative and eye catching.



Create a comic strip or storyboard about one of your choices.


Use lots of pictures and keywords to explain the process in a clear way.



SILVER


Create a poster about one of your choices

Use any key terms you have found, make it informative and eye catching!



Write 10 – 15 challenging quiz questions about ~~about~~ one of your choices


Write the questions and answers for an imaginary quiz



BRONZE

Create a mind map about one of your choices

Use any key terms you have learnt, make it informative and eye catching!



Write three tweets to summarise facts about one of your choices.

Tweets must be no more than 140 characters and they must be informative. Use # for keywords.

Choices

Choice 1 - Famous people:

- Queen Victoria
- Malala Yousafzai
- Christopher Columbus
- Martin Luther King
- Barack Obama

Choice 2 - Famous Events:

- Sinking of the Titanic
- World War Two
- England winning the World Cup.
- The moon landings
- The first conquest of Mount Everest

Choice 3 - Famous inventions/discoveries:

- Invention of electricity
- Invention of the internet
- Discovery of DNA
- Invention of aeroplanes
- Invention of the telephone

Choice 4 - Different countries:

- Thailand
- Italy
- Mexico
- Greece
- India

Online Learning and login details

Maths Watch

A complete online maths resource (including videos on all topics) that can be accessed on phones, tablets and desktops.

<https://vle.mathswatch.co.uk/vle>

Year 7 LOG IN

Name: Duncan Edwards

Username: EdwardsD7@woacademy

Password: WOAMATHS7

Year 8 LOG IN

Name: Georgia Best

Username: BestG8@woacademy

Password: WOAMATHS8