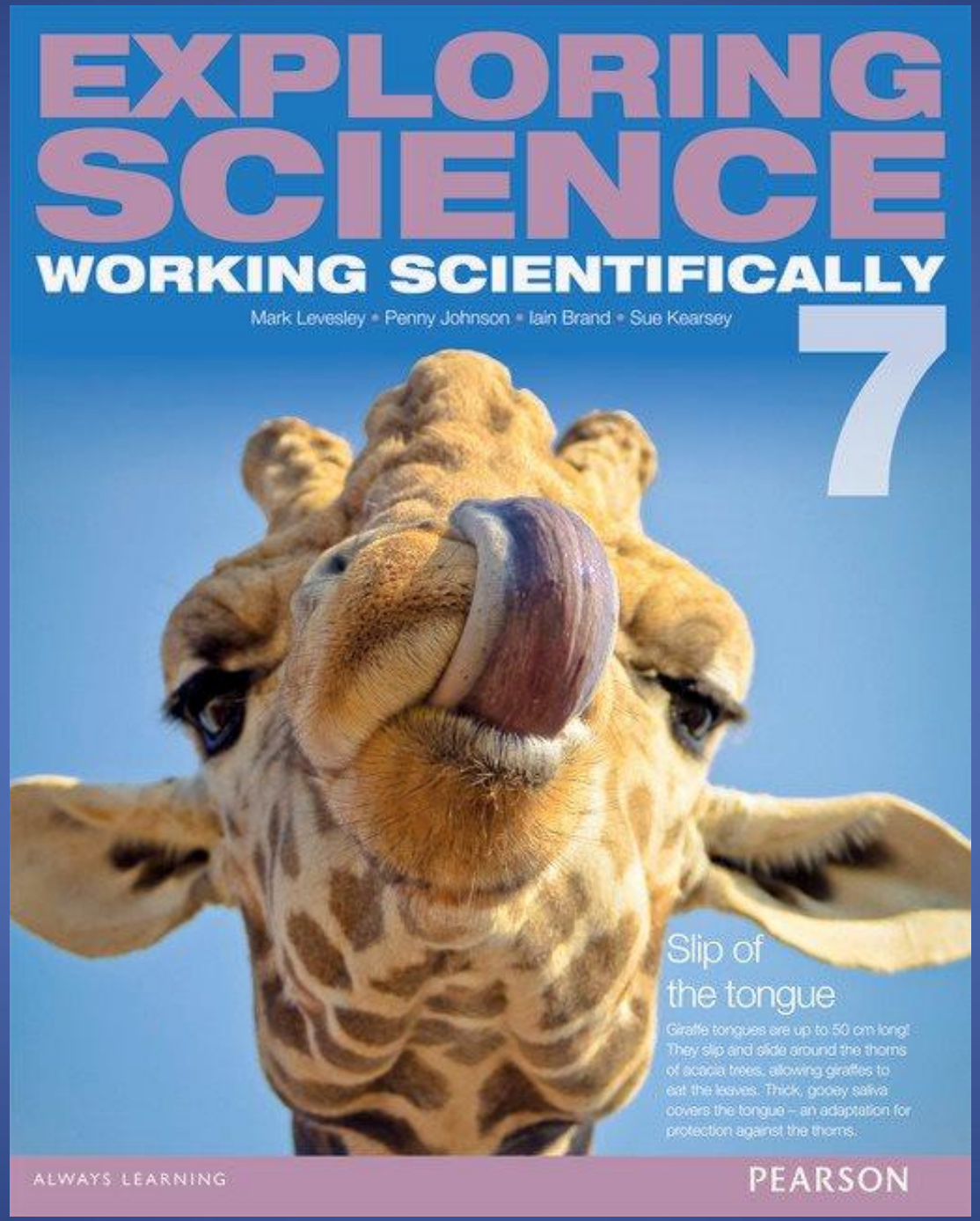
Year 7 Science

Haydon School

Year 7 Science

- 7 lessons per fortnight
- Exploring Science scheme of work
- Biology, Chemistry and Physics topics covered throughout Year 7
- Assessments focus on different skills
- Assessment is a mix of both summative & formative tasks
- Homework set weekly by Teachers


EXPLORING SCIENCE
WORKING SCIENTIFICALLY
Mark Levesley • Penny Johnson • Iain Brand • Sue Kearsey
7
Slip of the tongue
Giraffe tongues are up to 50 cm long! They slip and slide around the thorns of acacia trees, allowing giraffes to eat the leaves. Thick, gooey saliva covers the tongue – an adaptation for protection against the thorns.
ALWAYS LEARNING
PEARSON

Science Topics Covered In Year 7

Biology	Chemistry	Physics
Cells, tissues, organs and systems	Mixtures and separation	Energy
Sexual reproduction	Acids and alkalis	Current electricity
Ecosystems	The particle model	Forces
		Sound

Strands – What we are going to assess

- Knowledge – in biology, chemistry, and physics.
- Skills – using equipment, mathematical calculations, drawing and interpreting graphs, literacy skills (e.g. summarising text).
- Understanding – use of modelling, applying knowledge to new situations, planning and evaluating investigations.

KS3 Assessment Timings

- For each topic students will have a formative assessment marked in books. The aim of this will be to help them improve in the strands they are weakest in.
- Every term students will complete a test summarising 3 topics.
- Word lists (definitions and key word pronunciations) and topic summaries are provided on Year 7 Science Google Drive folder for revision before the test. I have linked this on Show My Homework

7 Intro: Salt and boiling point

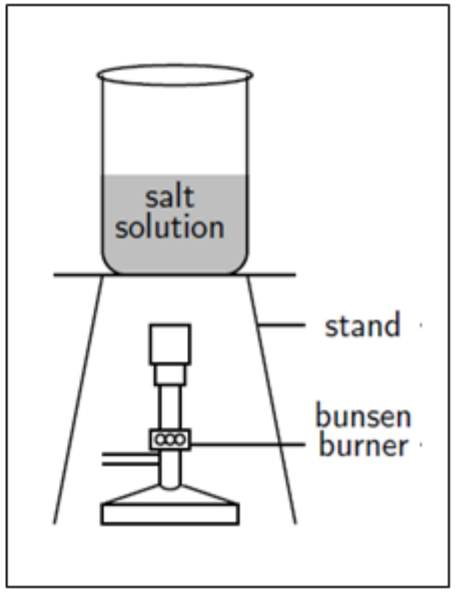
Strands assessed S1: using scientific equipment
U2: Planning investigations S3: Collecting and analyzing data

Task

You have been finding out about variables and how to design fair investigations.

Your task is to design a method to investigate the effect of the mass of salt on the length of time it takes water to boil.

You'll have to write out a plan for how you'll collect your information, and use scientific knowledge to help you identify the variables involved, and how you can keep the test fair.



Top tips:

- **Write out the aim for your experiment**
- **State your independent, dependent and at least 3 control variables for the experiment**
- **Write a risk assessment**
- **Write what you are going to do in a step by step method (S/E) or get a method from the teacher**
- **Draw a results table**
- **Set up your equipment and collect results following your method**
- **Make a graph of your results**

Topic: *Food and Nutrition*			
What Went Well:			
Strand	**I Can:**	**Band**	
K1,S4	Correctly use some scientific key words.	F	
K1,U1	Draw a correctly labelled scientific diagram	F	
K1	Described why the body needs each of the food groups.	D	
S4	I can use paragraphs to structure my work	D	
K1	Explain what happens to food in each organ	S	
S4	Use a wide range of scientific language accurately	S	
K1	Related the structure of organs to their function	E	
K1, U1	Model how enzymes work in digestion	E	
Even Better If:			
ReACT			

- This will show where a student has strengths and where a student needs improvement before the termly test

Biology topic 7A/C Cells, Muscles and Bones			
Task-Stick this onto <u>the centre</u> of a page. Draw images around to make this a title page Biology topic	Confidence level		
Objective	Red	Amber	Green
State the 7 life processes and use them to state if something is living or not			
State the parts of a microscope			
Describe how to prepare a microscope slide			
Draw a plant and animal cell			
State the functions of parts of cells			
Explain why a cell is either animal or plant			
Define the term tissue			
State the function of different tissues in an organ			
Identify plant and animal tissues			
Define an organ system and give several examples			
State what respiration is			
State how the body performs gas exchange (inhalation/exhalation)			
Describe the function of a skeleton and the purpose of joints			
Define the term "drug" and classify examples as stimulants or depressants			
Skill- Draw a line graph with a line of best fit			
Grade on 7A/C assessment	F/D/S/E		

What you can do to help

- At home you can help your child progress and enjoy science.
  - Encourage **reading** to promote literacy
  - Practice **mathematical** skills
  - Develop **scientific enthusiasm and curiosity** through use of documentaries, scientific articles and news stories, museum visits, pets, cooking, nature & looking at how mechanical objects work.
- **Ensure** that the weekly H/W is completed and exercise book is in good condition.

Set on Thu 14 Sep | Due on Fri 20 Jul

Revision resources and activities
This is not a homework.

Resources in this folder include:

- Summary notes, if you have missed a lesson you need to catch up on.
- Key vocab lists for each topic to learn.
- Quizzes to help you test your knowledge.

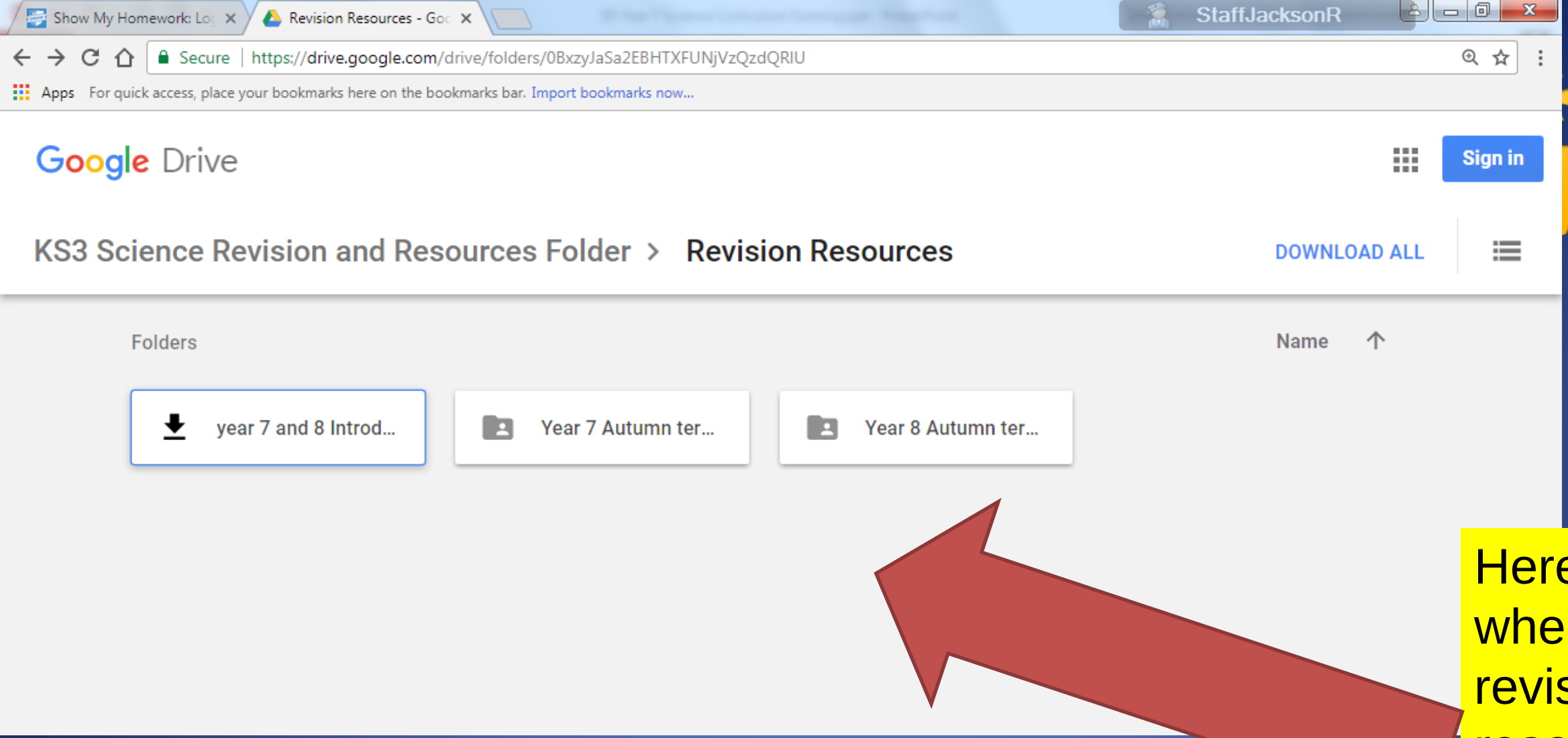
Use any resources to help you revise for any of your tests this year.

This folder will be updated regularly.

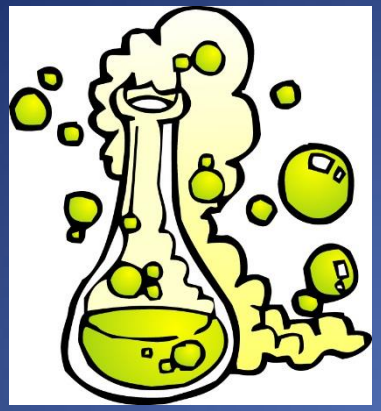
Remember to revise what you don't know, [illegible]sy.

https://drive.google.com/drive/folders/0Bxzy[illegible]a2EBHbG9Zcmh0RUZVbkE?usp=sharing

Revision resources for each topic



Here is where the revision resources are found for each test



Extra Curricular Activities

- Science Club Wednesdays after school in room 44, from 3:00-4pm, and **FREE** to attend (offered on a first come first served basis)!
- Science trip:
  - Year 7 London Zoo