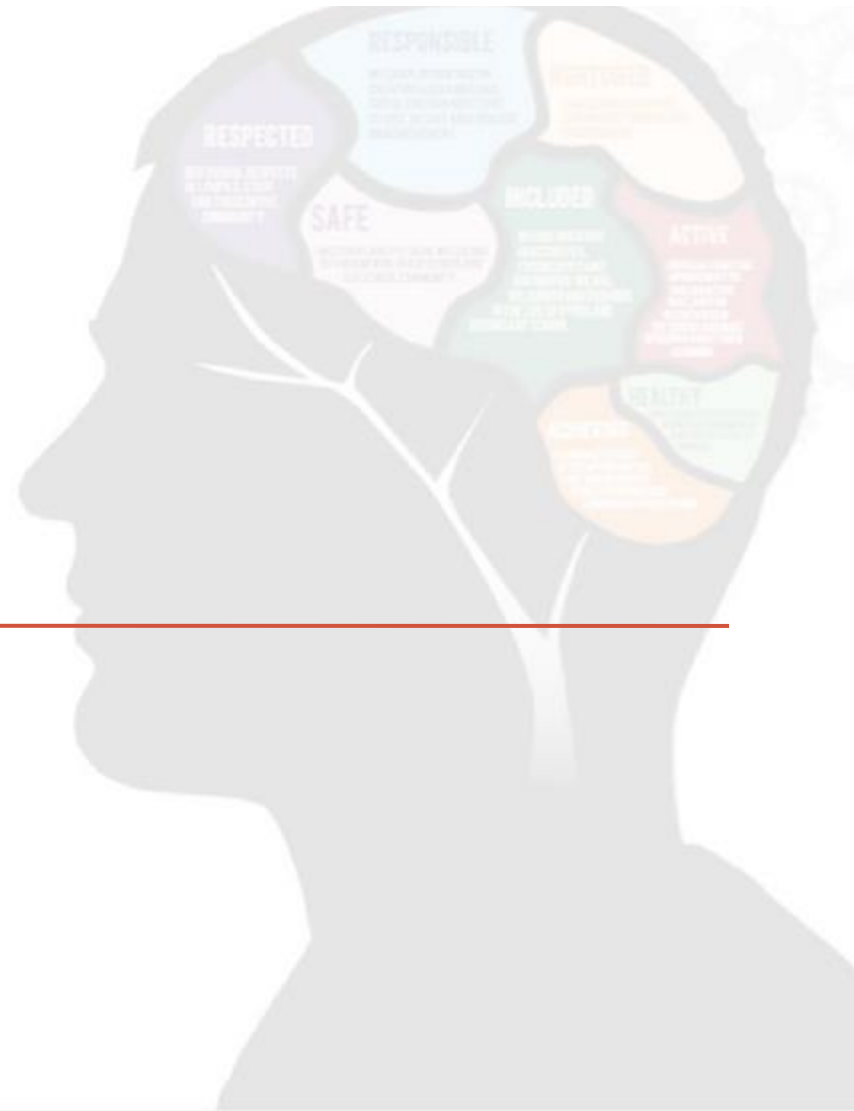




S3

STEM/Languages Course
2017/18



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STEM/Languages p1 Monday

From this year all S3 will undertake a new Core period in STEM and Languages.

STEM (Science, Technology, Engineering and Maths).

Languages – Languages for Life (Spanish)

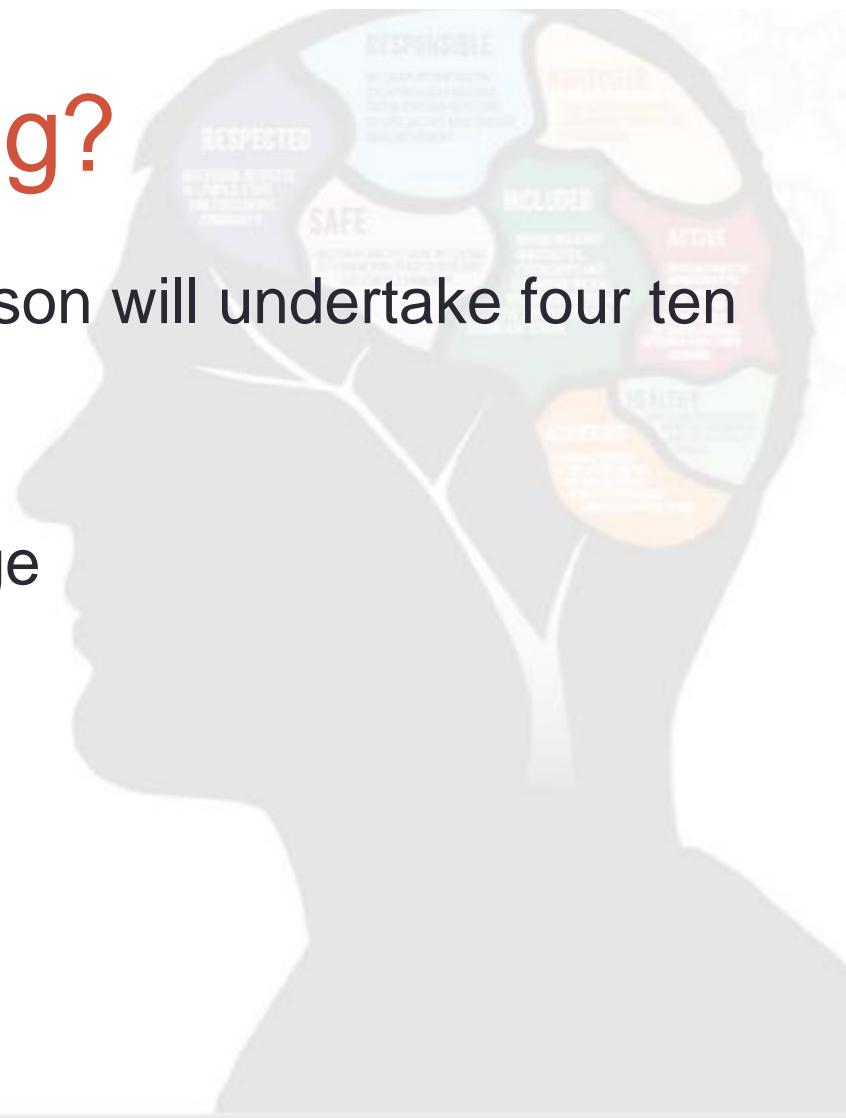
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What will you be doing?

Over the session each young person will undertake four ten week programmes.

1. STEM – Bloodhound challenge
2. STEM – BP Challenge
3. Languages for Life (Spanish)
4. Study Skills



Why are we doing this?

The Scottish Government recommends that **all** young people study each of the curricular areas up to the end of S3:

English

Maths

Social Studies

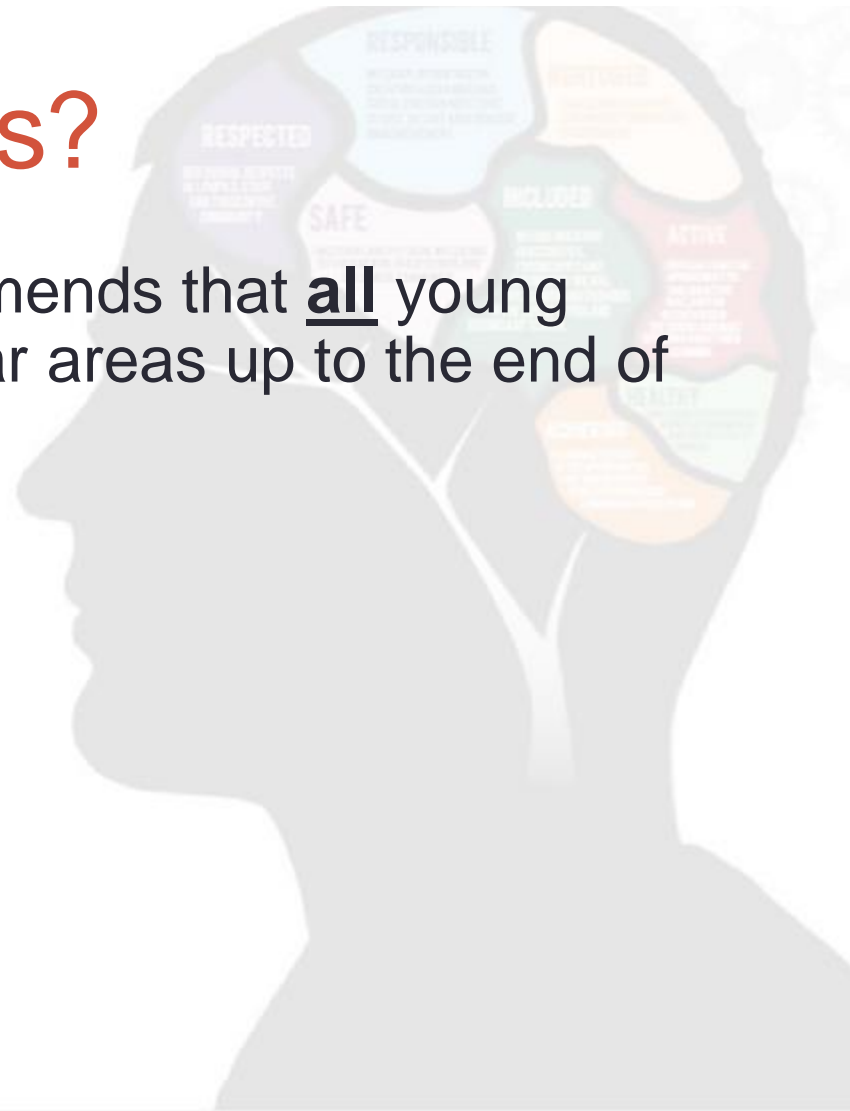
RME

Science

Technologies

Modern Languages

Expressive Arts

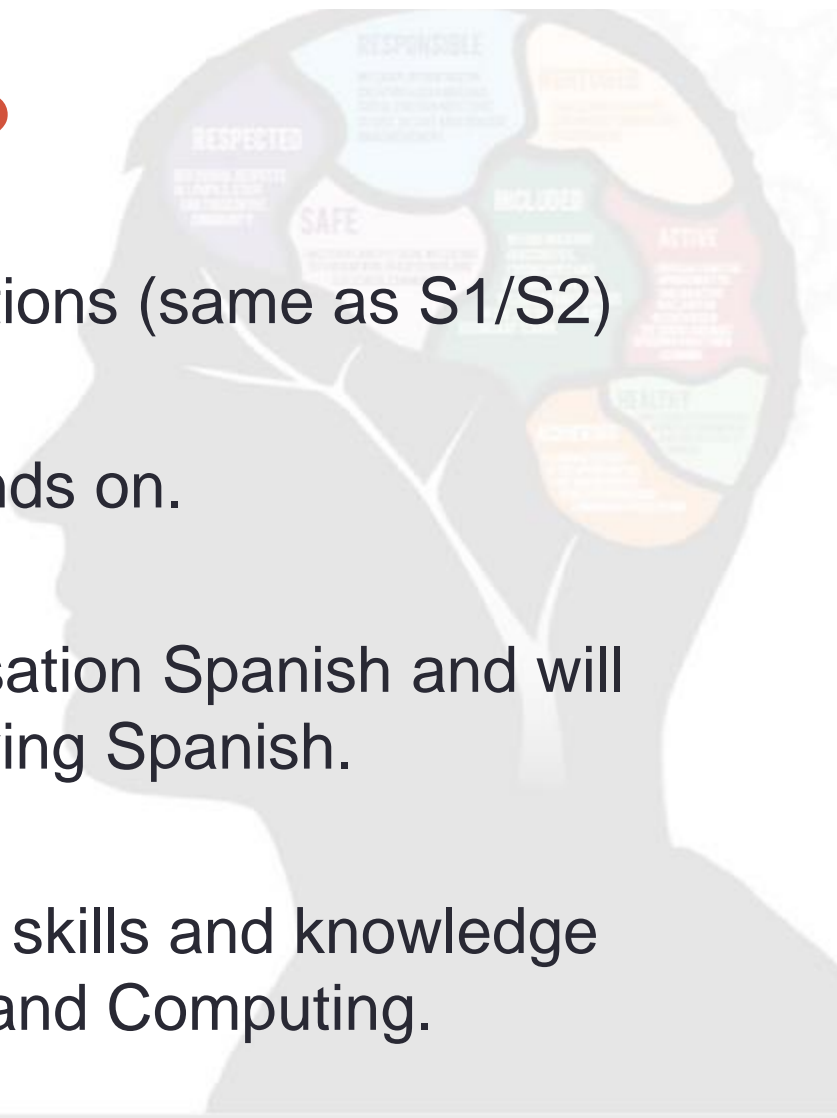


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How will I be doing it?

- Classes will run as practical sections (same as S1/S2)
- Classes will be practical and hands on.
- Languages will focus on conversation Spanish and will also support those already studying Spanish.
- The STEM courses will combine skills and knowledge from Technical, Maths, Science and Computing.



Languages for Life and Work Award

❖ Building Own Employability Skills

→ find out about job opportunities and employers; and the skills needed to apply for a job

❖ Modern Languages for Life

→ develop skills in listening and talking in practical and relevant contexts

❖ Modern Languages for Work Purposes

→ develop skills in talking and listening in a vocational context

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BLOODHOUND CHALLENGE





Aims

- Inspire pupils to engage with STEM
- Build your own rocket car in groups
- Develop team work skills
- Learn transferable skills



OUR VALUES
OUR



Bloodhound Challenge

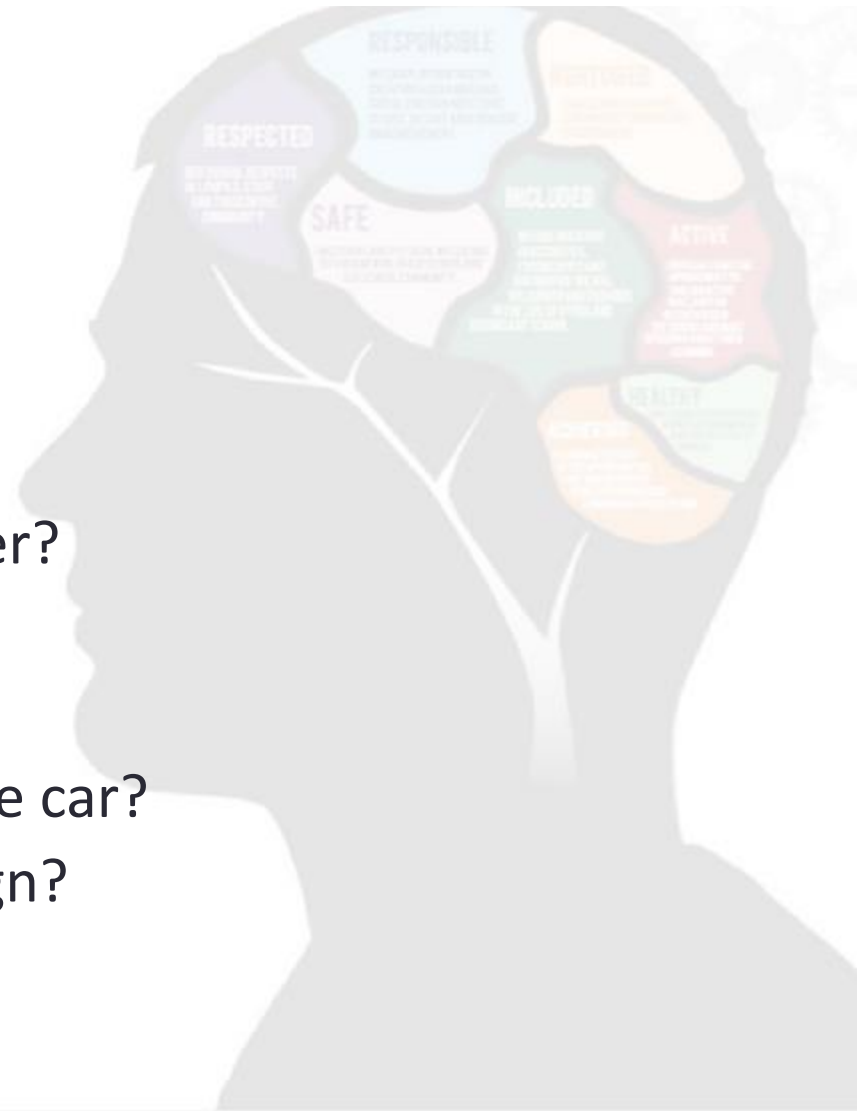
- What is it??
- <https://www.youtube.com/watch?v=ZorDMt2TbuE>



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- Brief Intro to Aerodynamics
- Speed, Distance and Time
- Newton's Law
- Will changes make your car stronger?
- Will changes make your car faster?
- Is weight important?
- Can you improve airflow around the car?
- Use of materials to customize design?
 - Tail fins?
 - Winglets?
 - Fairings?
 - Spoilers?





The power of nature

We depend on energy to power our cars, light our homes and keep us warm.

Non-renewable energy is unsustainable.

Forces found in nature can provide an alternative source of energy we can use long into the future.

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OUR
OUR



Handy Hydro

One force of nature which we can harness is hydropower.

Hydropower doesn't need to be produced on a huge scale; micro hydro installations offer a way to produce renewable energy from small, fast-flowing streams in mountainous areas.



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Your

Challenge



Create an efficient way of generating electricity from moving water.

Plan and carry out an investigation to:

- measure how much electrical energy your system can produce
- find the best design for extracting energy from moving water.

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