

Session 1- Science

I use a range of scientific equipment to take accurate and precise measurements or readings, with repeat readings where appropriate.

Science investigation!

- ▶ What do we need to remember when doing an investigation to ensure that we have reliable results?
 - Only change one variable.
 - Keep everything else the same and being accurate.
 - Record results accurately.
 - Look at results and ask, ‘Why they have happened this way? What do they mean?’

Here's what we're going to find out...

How does exercise effect our heart rate in comparison to our resting heart rate?

How do you think we could investigate this?



What do we need?

- Stopwatch/timer
- Space (outside)
- Pen/pencil and paper



Measuring your Heart Rate

- We measure heart rate in beats per minute (bpm).

Watch this video!

<https://www.youtube.com/watch?v=AHHr8qNU9QY>

- We will be counting our heart rate for 30 seconds and then doubling it to find out what it would be as an average for a whole minute.
- Practise trying to find your pulse!

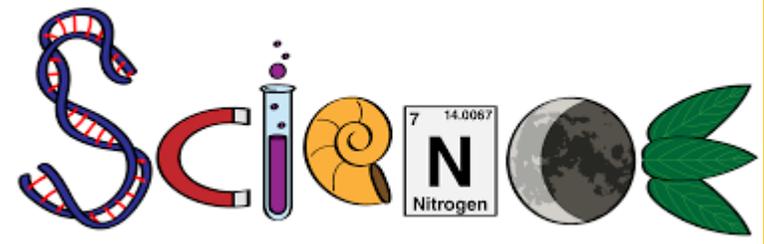


Method

1. Take our resting pulse every minute for 5 minutes and record the results.
2. Choose a type of exercise that you can do for 5 mins.
3. Set a timer for minute 1 and begin your exercise.
4. Record your heart rate for 30 seconds, double it and record.
5. Set a timer for minute 2 and begin your exercise.
6. Record your heart rate for 30 seconds, double it and record.
7. Set a timer for minute 3 and begin your exercise.
8. Record your heart rate for 30 seconds, double it and record.
9. Set a timer for minute 4 and begin your exercise.
10. Record your heart rate for 30 seconds, double it and record.
11. Set a timer for minute 5 and begin your exercise.
12. Record your heart rate for 30 seconds, double it and record.

Activity	Heart Rate (bpm)				
	After 1 minute of exercise	After 2 minutes of exercise	After 3 minutes of exercise	After 4 minutes of exercise	After 5 minutes of exercise
Resting					
Exercise: _____					





Session 2- Science

I record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

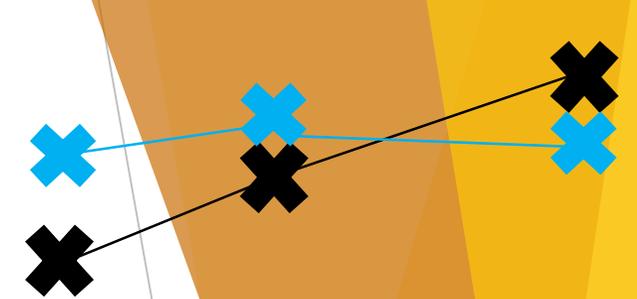
Presenting your data from last lesson

- ▶ Today, we are going to produce line graphs which show how your resting heart rate compares with your heart rate after different amounts of exercise.
- ▶ We will be making a line graph and will show the changes over 5 mins of your resting heart rate and your heart rate after exercise.
- ▶ These two different lines of data will be represented with a colour coded key.

Presenting your data from last lesson

- ▶ Use the template for your line graph.
- ▶ Write your title of what we were investigating at the top.
- ▶ Consider the increments (jumps) that you would like to count up the y-axis in and be sure to have a range from zero up to and slightly beyond the highest that your heart rate reached.
- ▶ Write 1 2 3 4 5 along the x-axis with clear gaps in between. We should be able to follow up a line from these numbers rather than a box.

Presenting your data from last lesson

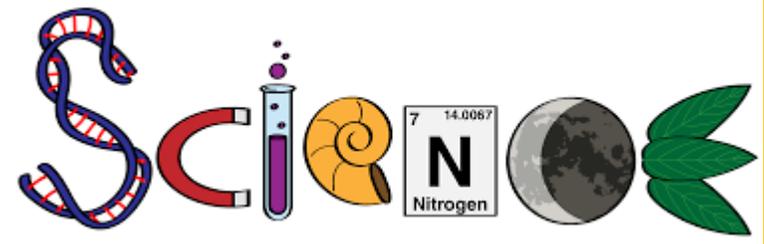


- ▶ Looking back at your results grid, and looking at your resting heart rate first, follow up the line from 1 and put a cross where it meets the height of your heart rate.
- ▶ Complete this for all of the results you got from 1-5.
- ▶ Draw a straight line with a rule from result 1, to the centre of the cross of result 2. Then draw a line from the centre of the cross on result 2, to the centre of the cross of result 3 and so on until you get to result 5.
- ▶ Repeat this process for the results for your active heart rate and draw the line with a different colour.
- ▶ Create a key somewhere on the page to show the 2 colours.

Conclusion- What can you learn from your results?

How does exercise effect our heart rate?





Session 3- Science

I can describe the effects of diet, exercise, drugs and lifestyle on how the body functions.

Effects of Alcohol on bodies:

- Using the following video, make a list of any impacts that exercise has on the functions of our body.

https://www.youtube.com/watch?v=hmFQqjMF_f0

- We can make a shared list afterwards.

Effects of Alcohol on bodies:

- ▶ Effect: Can prevent blood clots in arteries

Part: Blood Vessels

- ▶ Effect: Can cause you to lose control of speech

Part: Brain

- ▶ Effect: Causes memory loss

Part: Brain

- ▶ Effect: Can increase aggressive and violent behaviour

Part: Brain

- ▶ Effect: Can cause high blood pressure

Part: Brain

- ▶ Effect: Can lead to addiction and withdrawal (the symptoms of which can be fatal)

Part: Brain

- ▶ Effect: Can cause stomach cancer

Part: Stomach

- ▶ Effect: Can lead to liver damage or cirrhosis (liver failure)

Part: Liver

- ▶ Effect: Can increase good cholesterol when taken in small amounts

Part: Heart

Effects of Cannabis on bodies:

- ▶ Effect: Can make you feel happy and relaxed

Part: Brain

- ▶ Effect: Can make you hallucinate (this means that you may see, hear or feel things which aren't real)

Part: Brain

- ▶ Effect: Can make your memory worse

Part: Brain

- ▶ Effect: Can make it difficult to concentrate

- ▶ Effect: Can lead to serious, long term mental health problems

Part: Brain

- ▶ Effect: Can increase appetite and make you very hungry

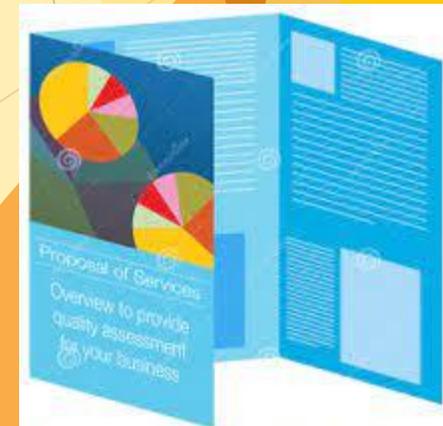
Part: Mouth

- ▶ Effect: Increases the heart rate

Part: Heart

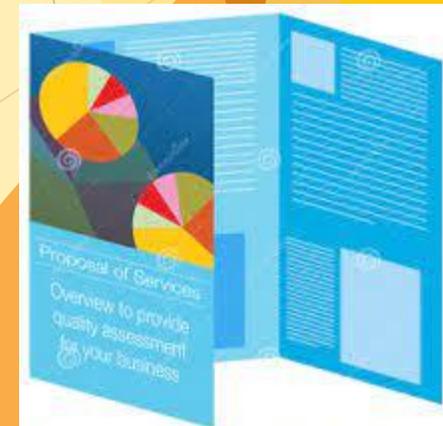
Your task

- ▶ Today, your task is to make a leaflet to give people information about how their diet, if they use drugs or drink alcohol could effect their overall health and the way their body works.
- ▶ For some people, as we know, these can be quite sensitive things to discuss.
- ▶ We want you to imagine that your leaflet is going to be put in the local Doctors' Surgery so it needs to be helpful and informative for lots of different people.



How should it look?

- ▶ It is up to you how your leaflet is presented and folded.
- ▶ There should be:
 - Different sections for the effects of drugs, exercise and alcohol on someone's body
 - Helpful tips
 - Pictures/diagrams
 - Colour
 - Clear and easy to read information

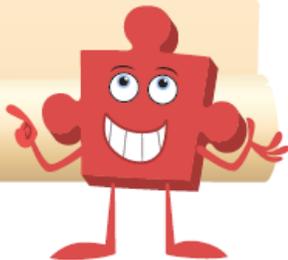




Puzzle 5

Weekly Celebration 2

This week we are celebrating people who:
Try to solve friendship problems
when they occur



Session 3- PSHE My Mental Health

I know how to take care of my mental health.
I know how to help myself and others when worried
about a mental health problem.



The Jigsaw!® Charter

We take turns to speak

We use kind and positive words

We listen to each other

We have the right to pass

We only use names when giving compliments or when being positive

We respect each other's privacy (confidentiality)



Calm Me

- ▶ We have been learning together for over half the school year now and know each other quite well. Some of you are good friends with each other. Some of you only know each other a little bit. Some of you spend time with each other outside of school. All of us are members of this class. In our 'Calm Me' time in the Relationships Puzzle we are thinking about different types of relationships. This time is a time to relax the body and calm the mind to bring ourselves into the optimum state for learning. So let's start by imagining the golden thread pulling your spine nice and straight as you sit up in a dignified and proud position in your chair. Both feet flat on the floor and aware of your body touching the chair, your feet touching the floor, the texture of your clothes on your skin, the temperature in the room...close your eyes to help keep distractions to a minimum... Start to focus on your breathing... use the 4/6 technique (breathe in through the nose to a silent count of 4 1..2..3..4 and gently and slowly out, through the mouth, to a silent count of 6 1..2..3..4..5..6) if you find it helpful, or just enjoy focussing on your breathing until you feel still and quiet on the inside and the outside...
- ▶ (Strike the Jigsaw Chime) Let your mind follow the sound of the chime until it drifts far into the distance... . Allow any tension or worry to pass down through your body and out through your feet...until you feel relaxed... check out your shoulders... are they tense or relaxed? In the quietness of your mind, let yourself imagine a stage in a theatre... build the scene... and on the stage you see your favourite person in the whole world... can you see yourself in the audience watching your very favourite person walking onto the stage? Can you imagine everyone applauding, clapping for your favourite person as he or she takes a big bow and looks out into the audience straight at you, for your recognition? Just imagine the scene and sense how you feel. Stay with the picture for a few more seconds and then ask your mind to save the picture so that you can see it again whenever you want to...
- ▶ Very gently focus back on your breathing... 4/6... or follow the breath as it travels to your lungs... When you are ready and when you can no longer hear the chime, start to bring your focus back to the room and the present moment... Stretch your arms and legs, move your head gently from side to side, and slowly open your eyes...

Cycle of thoughts..

- ▶ **Thoughts:** Someone posts a picture of themselves in their new outfit on Instagram. They get sent some mean posts about the picture with people making fun of them. They think, 'I hate who I am'.
- ▶ **Feelings:** This gives them sad and angry feelings about themselves. 'They feel stupid and embarrassed'.
- ▶ **Actions:** They stop socialising with others at school. This leads them to think...
- ▶ 'Nobody likes me' and the cycle continues...
- ▶ Using this cycle, have a look at and reflect upon these scenarios...



Let me Learn:

Look at the different scenarios...

- ▶ Can you work out if a thought, feelings, actions cycle has started or is taking place, and if there are any signs or clues that show this person might be in need of some help or advice because their worries are getting TOO BIG for them to manage?

Trent is always looking at pictures of celebrities online and on social media because he wants to look like them. He has a really fashionable and popular group of friends and they are always chatting about the latest clothes or cool things to do. Just lately Trent has put on a little bit of weight. He hasn't changed what he eats and he still exercises every day. His Mum said not to worry and that it was just his body going through a phase of growing up. He is worried and it's starting to keep him awake at night. He has started to miss eating lunch on purpose. Some of his friends joke by saying that he needs to go to a gym and that he will never get a girlfriend.

Shari has had a growth spurt and she is now the tallest girl in the class. She feels awkward and hates getting changed in front of anyone else. Some of the other girls have started to tease her about her height. She has started to hang around with a group in school who have a tough reputation so that people leave her alone. They are always getting into trouble but she goes along with it to keep in with them. Inside she feels she doesn't know who she is any more. She doesn't see or speak to any of her old friends.

Let me Learn:

Look at the different scenarios...

- ▶ Can you work out if a thought, feelings, actions cycle has started or is taking place, and if there are any signs or clues that show this person might be in need of some help or advice because their worries are getting TOO BIG for them to manage?

Just lately Allesia's friends have noticed she is quieter than usual in school and hasn't been chatting as much on social media. They know that Allesia's parents split up about 3 months ago but she doesn't like talking about it. When she was getting changed for PE (Physical Education), one of her friends noticed that Allesia had lots of fine cuts on her arms. Allesia saw and quickly tried to cover them up. When they asked her about it, she said it was nothing to worry about.

Noah has stopped going to football practice after school. He really used to enjoy it. When his best friend Harry asked why he wasn't going any more, Noah said it was boring. Noah's been finding it difficult to concentrate on his work, and Harry has noticed that he tries to stay indoors at break times, and now gets his Dad to collect him after school. When Harry asks him why, Noah gets really angry. Last week Harry saw Noah break one of his toys on purpose by throwing it against a wall. Harry knows that Noah used to get bullied by someone and he is starting to wonder if it is happening again.