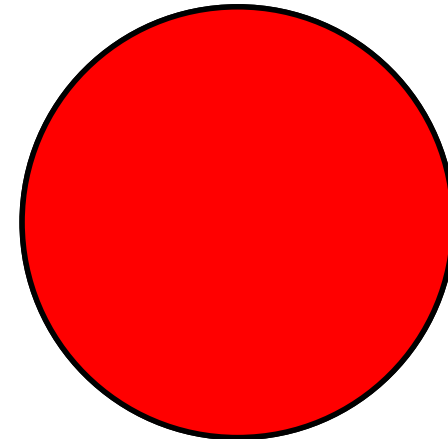




Previous learning – aerobic and anaerobic systems. Energy sources as fuel.

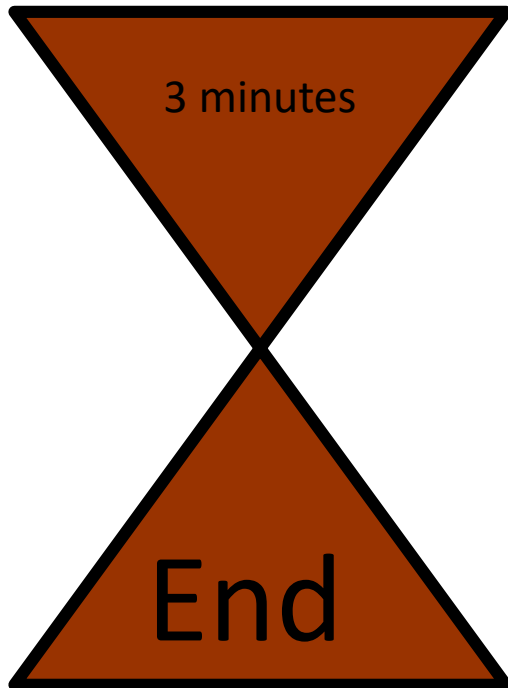
Consolidate your learning! Did you understand last weeks lesson? Try the worksheet on last weeks lesson.

5 minutes





Complete the worksheet on your desk on movements possible at joints (Year 10 work).
Help desk available if needed.





04/10/2017

Planes and axes of movement



- Homework – Complete the extended piece of writing on lined paper.

You will have worksheets to help you.

- Due date –



- Learning focus – Planes and axes of movement

Must – Identify the 3 planes and 3 axes of movement (5/4)

Should – Understand the planes and axes and explain how they divide the body (6/7)

Could – Link the planes and axes to sporting actions (8/9)



You must know the anatomical position, which is the position below.

Anatomical position

The anatomical neutral position is:

- Standing upright
- Legs together knees straight
- Toes pointing forwards
- Arms by the sides
- Palms facing forwards





Planes and axes of movement

Complete in your book.

What is a plane of movement?

<https://www.youtube.com/watch?v=BkYz4bqr8Bc>

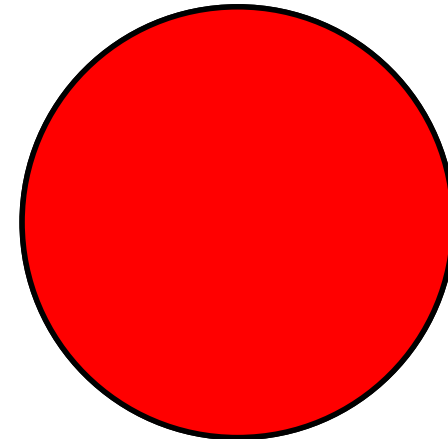
What is an axis of the body?

Can you identify the 3 planes of movement?

Can you identify the 3 axes?

Extension – Can you pick one of the planes or axis's and explain its role in movement.

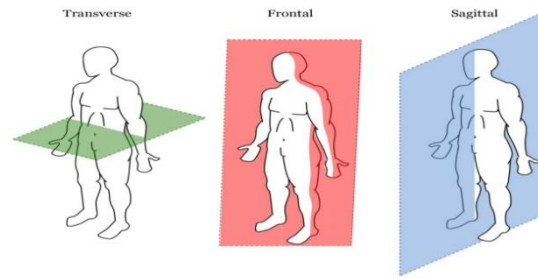
5 minutes





Planes and axes work together and therefore movement occurs through a plane and around an axis.

A **plane** is an imaginary line or surface that divides the body into two.

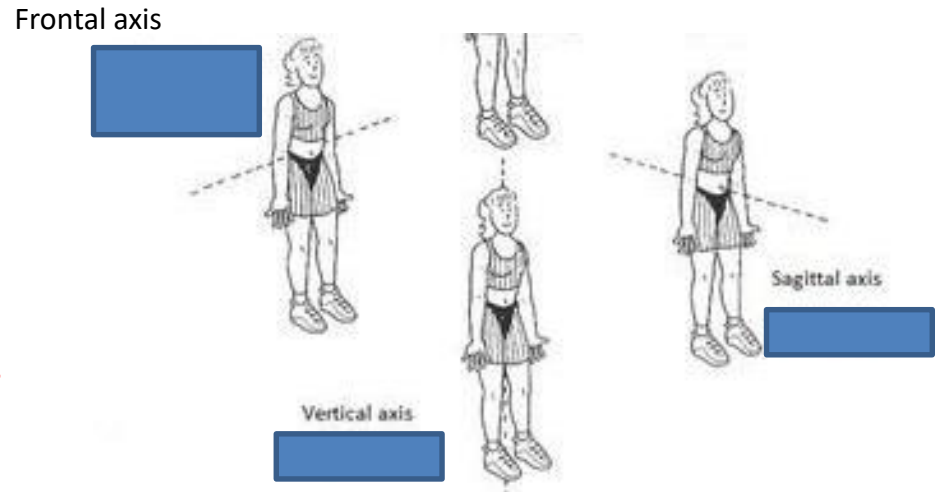


An **axis** is an imaginary line around or about which the whole body or part of the body can turn.

Task -

Can you think of the type of movements available at any of the axis?

Write the axis and then the movements.





Understanding the Planes and Axes

10mins

- Resources needed –

- 6 jelly babies

- 3 cocktail sticks

- One worksheet

Task FOURS–

Using the jelly babies, you must correctly cut (use a ruler) 3 jelly babies into the correct planes (Frontal, Transverse and Sagittal). Then place it onto ONE sheet in the correct place.

Using the remaining 3 jelly babies, place one cocktail stick in each jelly baby to correctly show the axis.

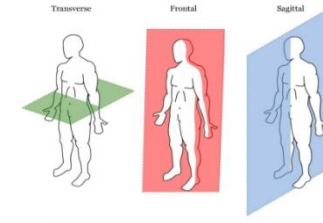
Once completed – Have a go at turning the jelly babies and understanding the planes of movement in your pairs. **Be prepared to share the answer of describing each plane and axis.**

Extension –

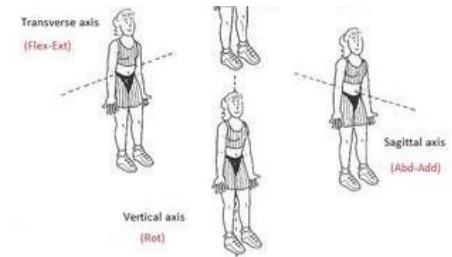
1. In pencil, using the jelly babies to help, draw the correct plane and axis on your own sheet.

2. Come up with 3 sporting examples for:

- Sagittal plane-frontal axis -eg
- Transverse plane-vertical axis -eg
- Frontal plane-sagittal axis - eg



End





Can you name the plane and axis for these movements? Each movement will have a plane and axis.

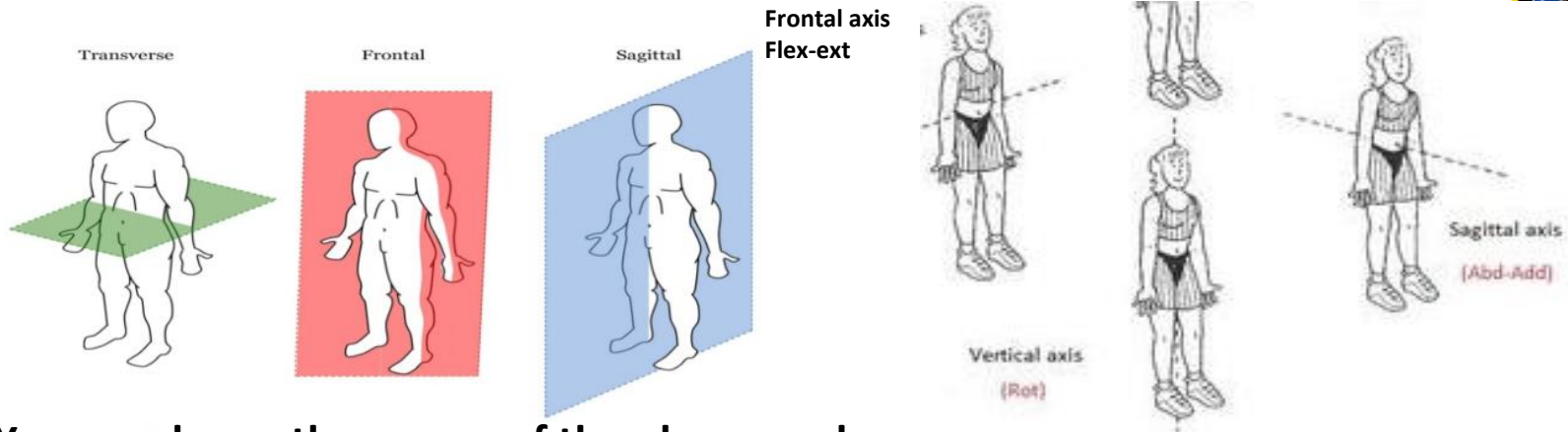
Start with the easiest (top 3)

Full body movements



Part body movements





You now know the names of the planes and axis. Complete the following tasks:

- 1. Which pairs of planes and axis work together to create movement patterns. (Think about the axis first and what would happen when you spin the axis, then consider which plane that movement moves through).**
- 2. Can you name the movement at joints possible at each plane and axis.**
- 3. Name a sporting example for each pair (one full body and one part body) (6)**

Check your answers:

Frontal axis - Sagittal plane (Flexion and Extension) Front Somersault + flexion at the elbow to catch a ball.

Vertical axis – Transverse plane (Rotation) Full twist in trampolining + Golf swing

Sagittal axis – Frontal plane (Abduction and Adduction). Cartwheel +moving the arm away from midline of the body to hit a tennis ball.



Analysis of written work

- Read the extended piece of writing and complete tasks 1 and 2 on the top of the sheet.
- You can use your work sheet and books to help with tasks.
- This will then aid you for your HW.

2.6

Planes and axes: extended writing answer analysis

See page 54

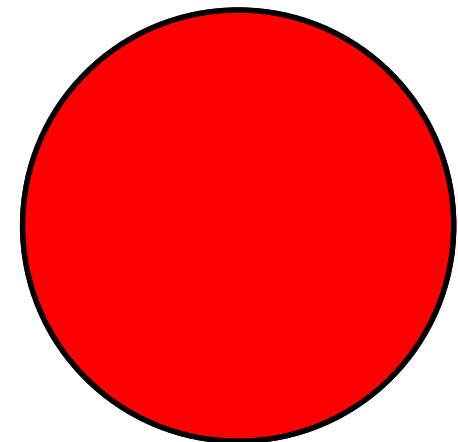
Let's have a look at an extended writing question for planes and axes of movement.

Read the high-level answer provided below and:

- 1) Highlight the key terms and important information.
- 2) Add notes around the outside to define key terms, add any extra detail and comment on things you like about the style of the answer. Imagine you are marking this person's answer for them.

- Extension – if completed, then name one example of your own choice, for each pair of plane and axis. (9)

10 minutes





Progress check

- Complete the sheet on planes and axes to show your progress. Give yourself a grade for lesson from the learning outcomes.

Underneath, complete a sentence on WWW and one on an EBI for lesson.

Must – Identify the 3 planes and 3 axes of movement (5/4)

Should – Understand the planes and axes and explain how they divide the body (6/7)

Could – Link the planes and axes to sporting actions (8/9)