

BROOKE WESTON PE

WORKBOOK

KS4



NAME: _____

TEACHER: _____

FORM: _____

Skeletal System:

Tasks

- 1 — At the top of each box below is the name of a protective bone. Add to each box the organs that each bone protects. Use the words from the word bank to help you.

Cranium

Ribs

Pelvic girdle

Vertebral column

Word bank

- spinal chord
- bladder
- liver
- lungs
- female reproductive organs
- brain
- heart
- spleen

Think of where the organs are in your body and link them with the nearest protective bone.



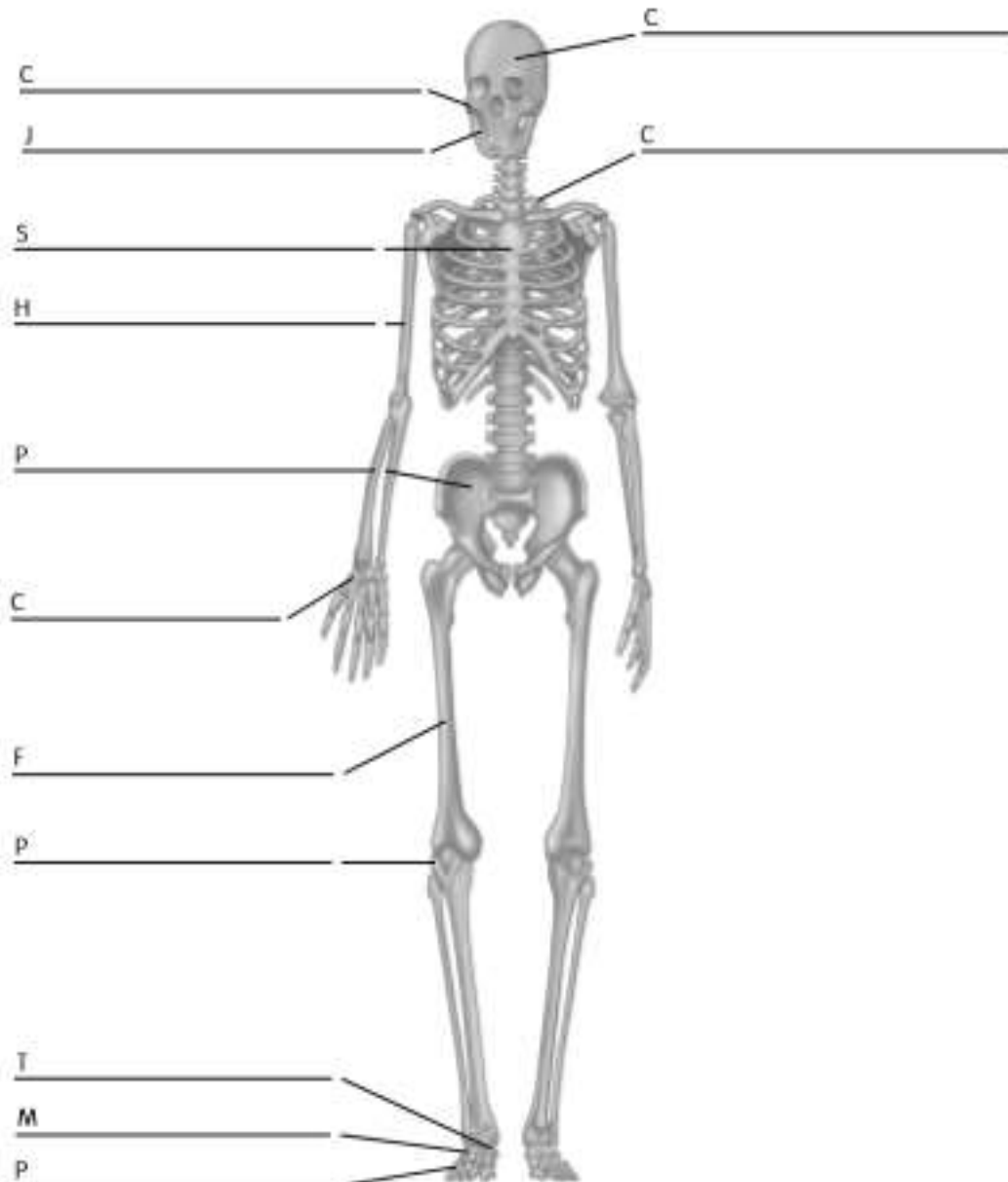
- 2 — For each protective bone, give a sporting example of when it would come into use.

For example: ribs – chesting down a ball in football.

TASK:

- 1) Label the skeleton
- 2) Identify on the skeleton different types of bones (long, short, flat and irregular)

Long	Cylindrical shape and found in limbs
Short	Small and compact
Flat	Flat surface – main function of protection
Irregular	Complex individual shapes



Task

Study the table about vertebrae below and answer the questions.

	Cervical	Thoracic	Lumbar	Sacral	Coccyx
Number of	7	12	5	5	4
Where in the body	Neck	Chest	Lower back	Pelvic area	Base of the spine
Most important function	Top two vertebrae, atlas and axis, help turn the neck and protect spinal chord.	Attached to the ribs and help with breathing: protect spinal chord.	In the area of the column where the greatest amount of movement occurs so bears a lot of weight. Protect spinal chord, the largest vertebrae in the body.	They are fused together and make up part of the pelvic girdle.	They are fused together to form the base of the spine.
What is attached	Neck muscles	Ribs	Back muscles	Joins spine and pelvic girdle	Base of spine attached only to the sacral vertebrae

a) How many vertebrae are there in total?

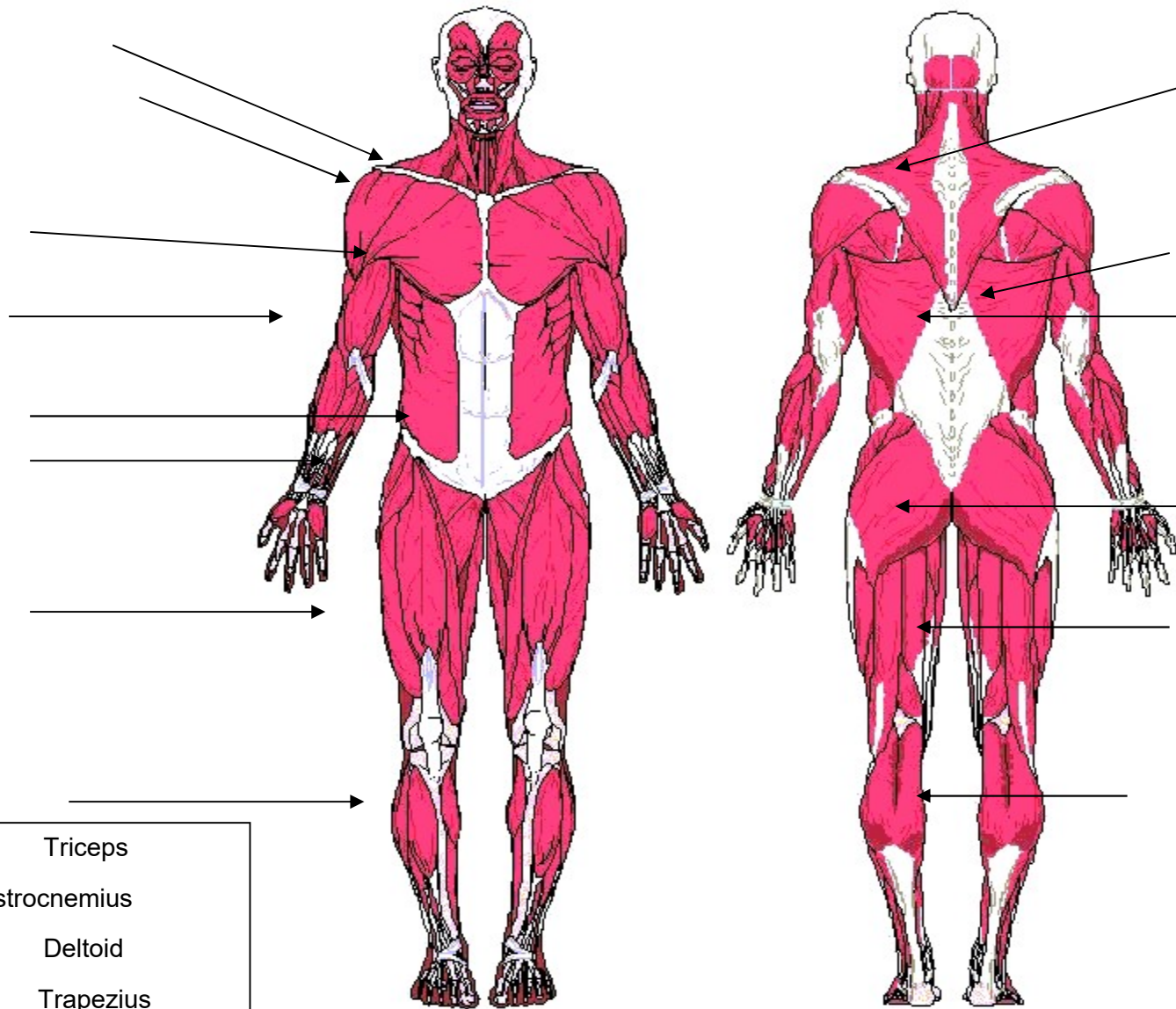
b) Which vertebrae are found in the chest region of the body?

c) Which vertebrae are the largest in the body?

d) What is the main job of the thoracic vertebrae?

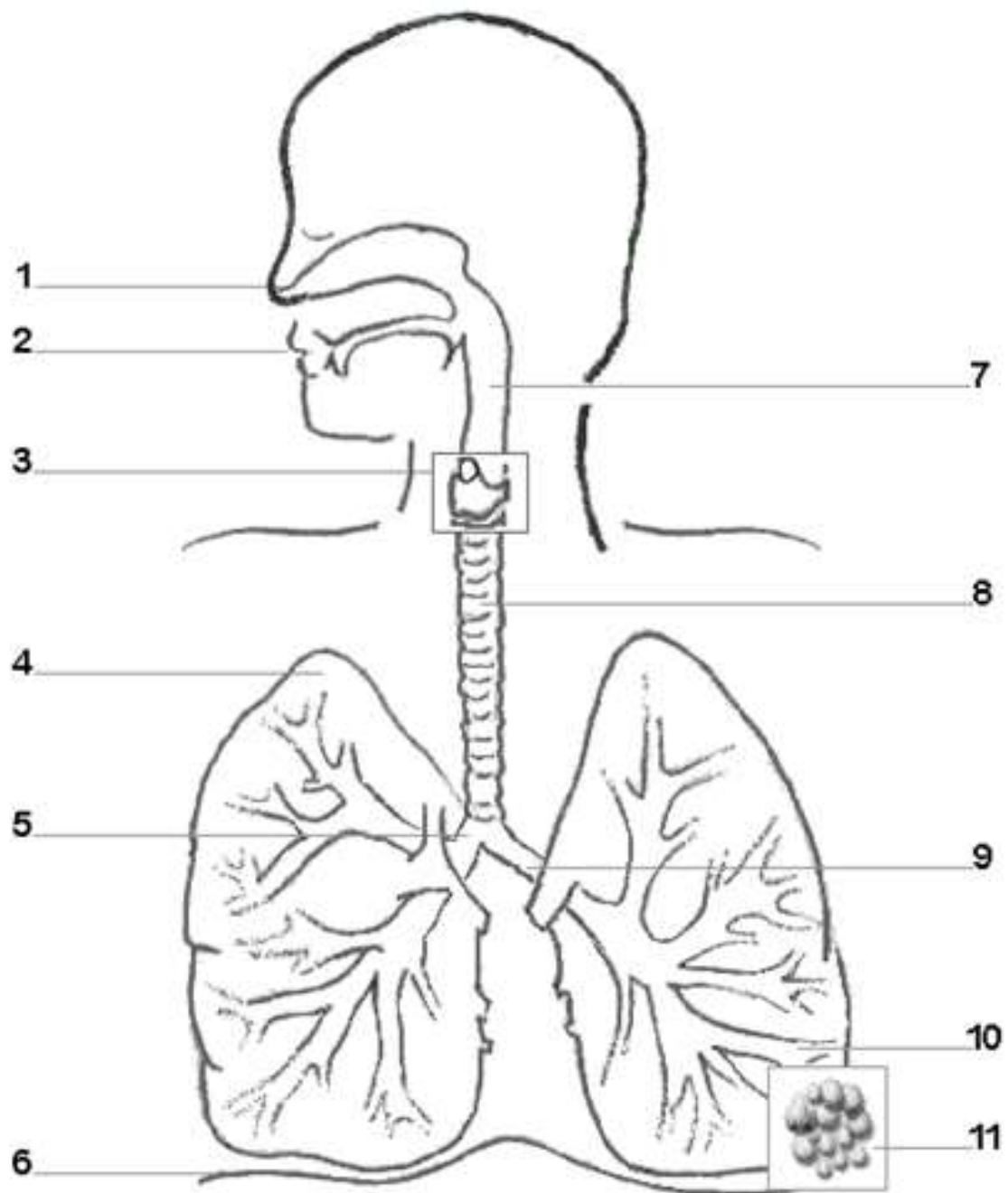
e) There are two types of vertebrae that are fused. Which are they?

Major muscles of the human body



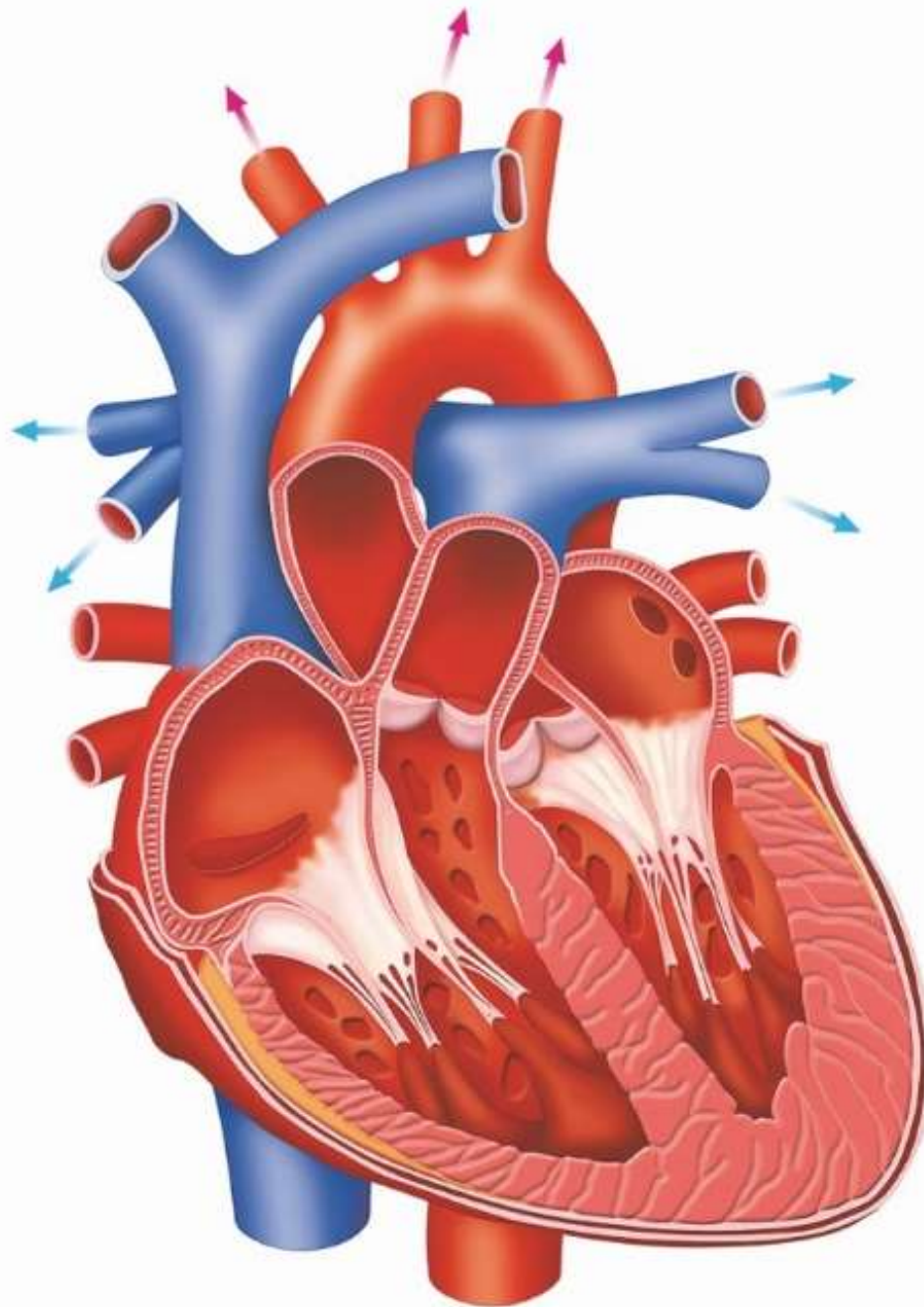
Abdominals	Triceps
Biceps	Gastrocnemius
Quadriceps	Deltoid
Pectorals	Trapezius
Latissimus Dorsi	Hamstrings
Gluteals	Rotator Cuffs
Hip Flexors	Tibialis Anterior

Label the Respiratory System



Nose	Mouth
Alveoli	Trachea
Bronchus	Bronchioles
Larynx	Lung
Latissimus Dorsi	Diaphragm
Oesophagus	Bronchi

Label the Heart



Left atrium

Right atrium

Right ventricle

Left ventricle

Pulmonary vein

Aorta

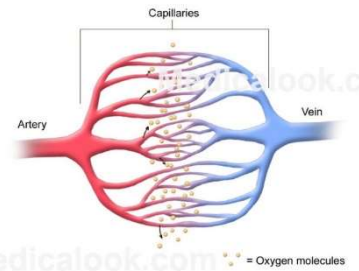
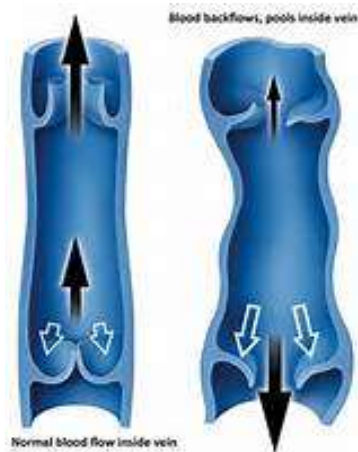
Vena cava

Pulmonary artery

Bicuspid Valve

Tricuspid Valve

Blood flows through the body via 3 types of blood vessels which are arteries, veins and capillaries



Identify which statements are true/false

- Arteries have thin walls _____
- Veins have large internal diameters _____
- Capillaries are microscopic blood vessels that link arteries to veins _____
- Arteries carry deoxygenated blood _____
- Veins carry oxygenated blood _____
- Capillaries carry oxygenated and deoxygenated blood _____

Mix and Match the correct word to the definition

Heart rate
Stroke Volume
Cardiac Output

The volume of blood pumped out of the heart in each contraction (beat)


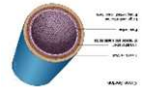
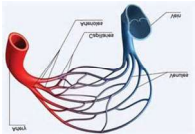
The number of times your heart beats in a minute

The volume of blood ejected from the heart in a minuet (SV x HR)

220-age is maximum HR

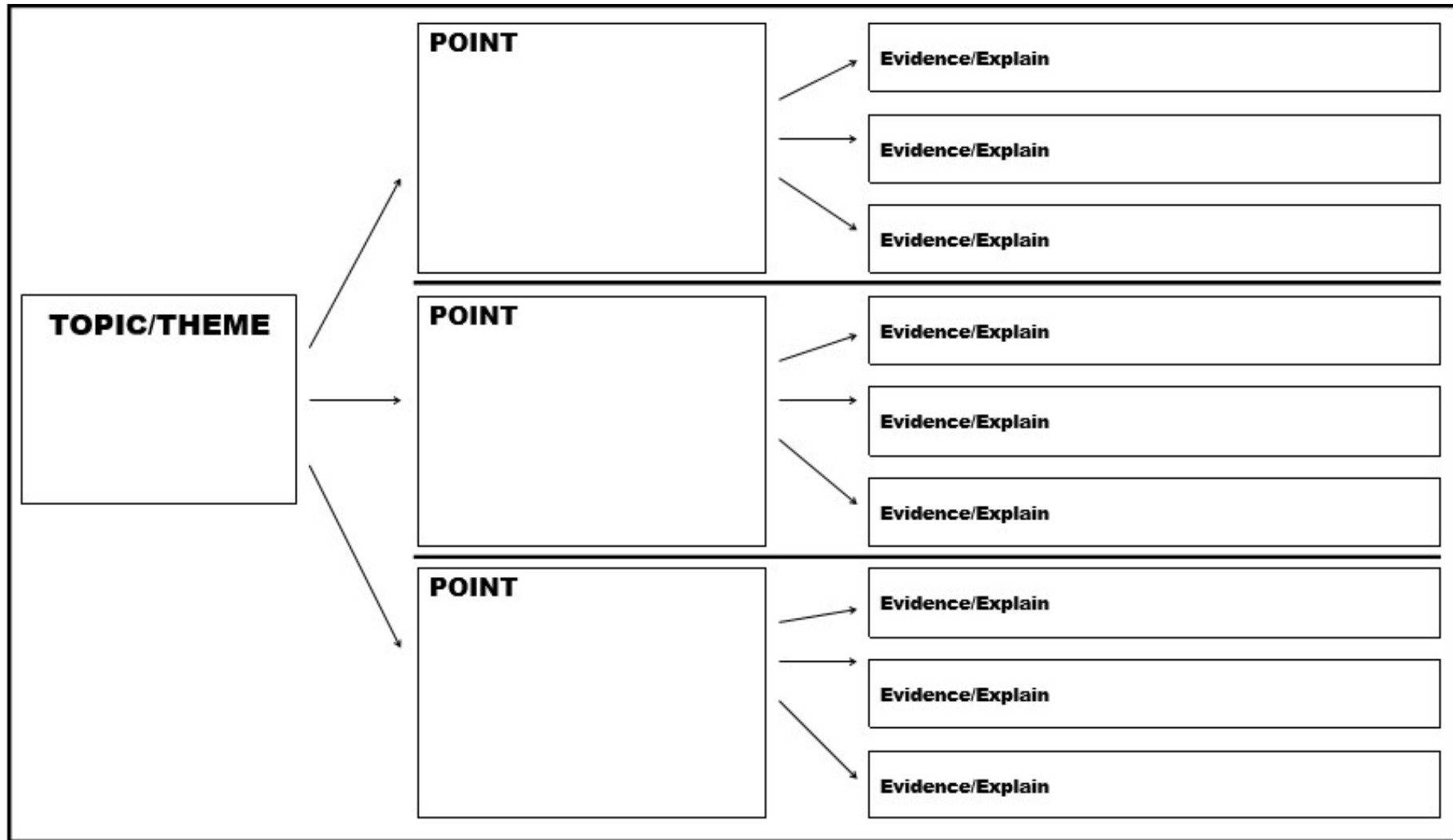
- My maximum HR is _____
- My resting HR is _____

Complete the table:

	Type of blood carried	Speed of blood	Pressure of blood	Valves	Diameter of walls	Thickness of walls
Arteries 						
Veins 						
Capillaries 						

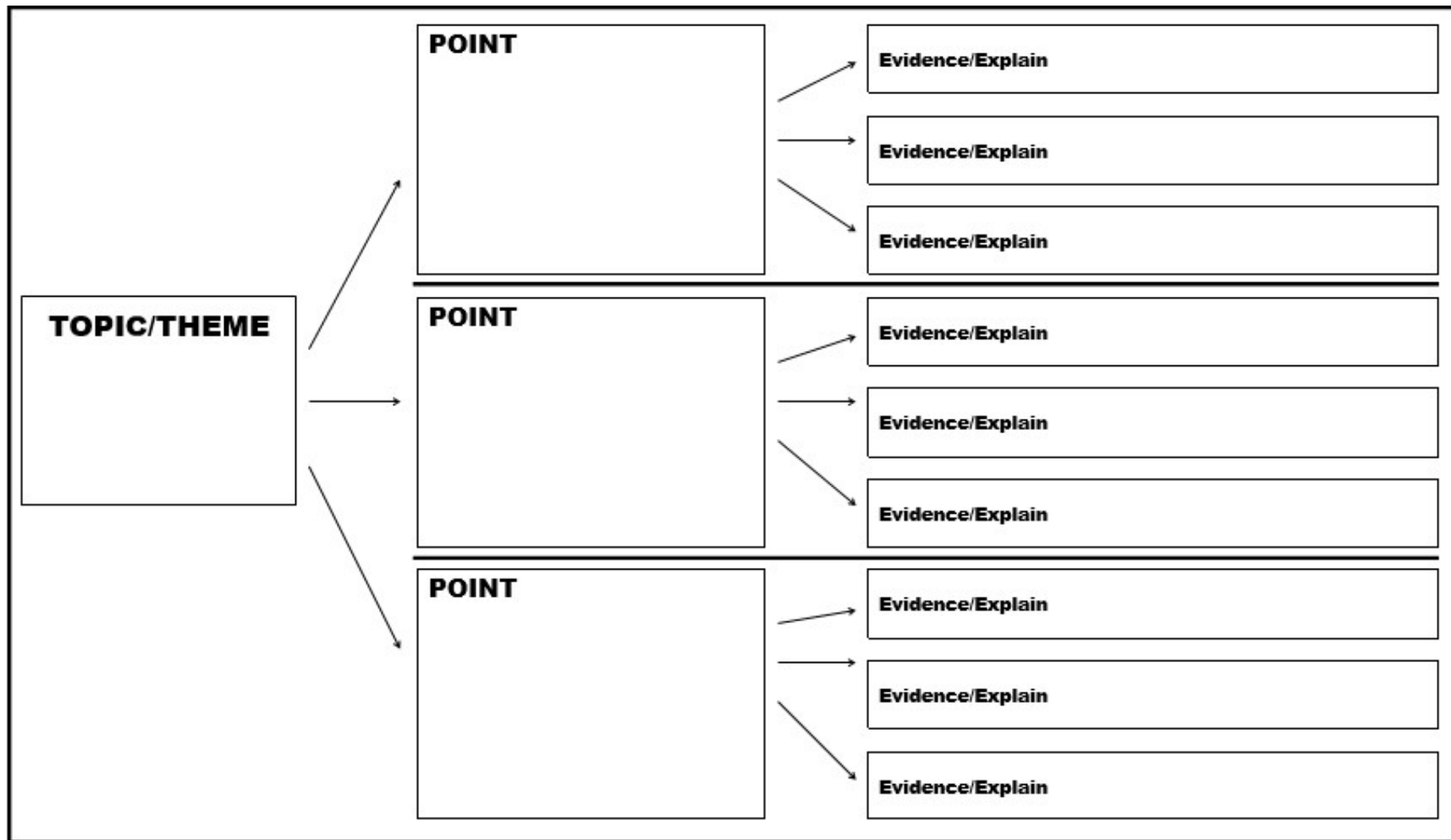
Section 2 – Sport Specific Debates

Q1: Should PED's be made legal in professional sport?



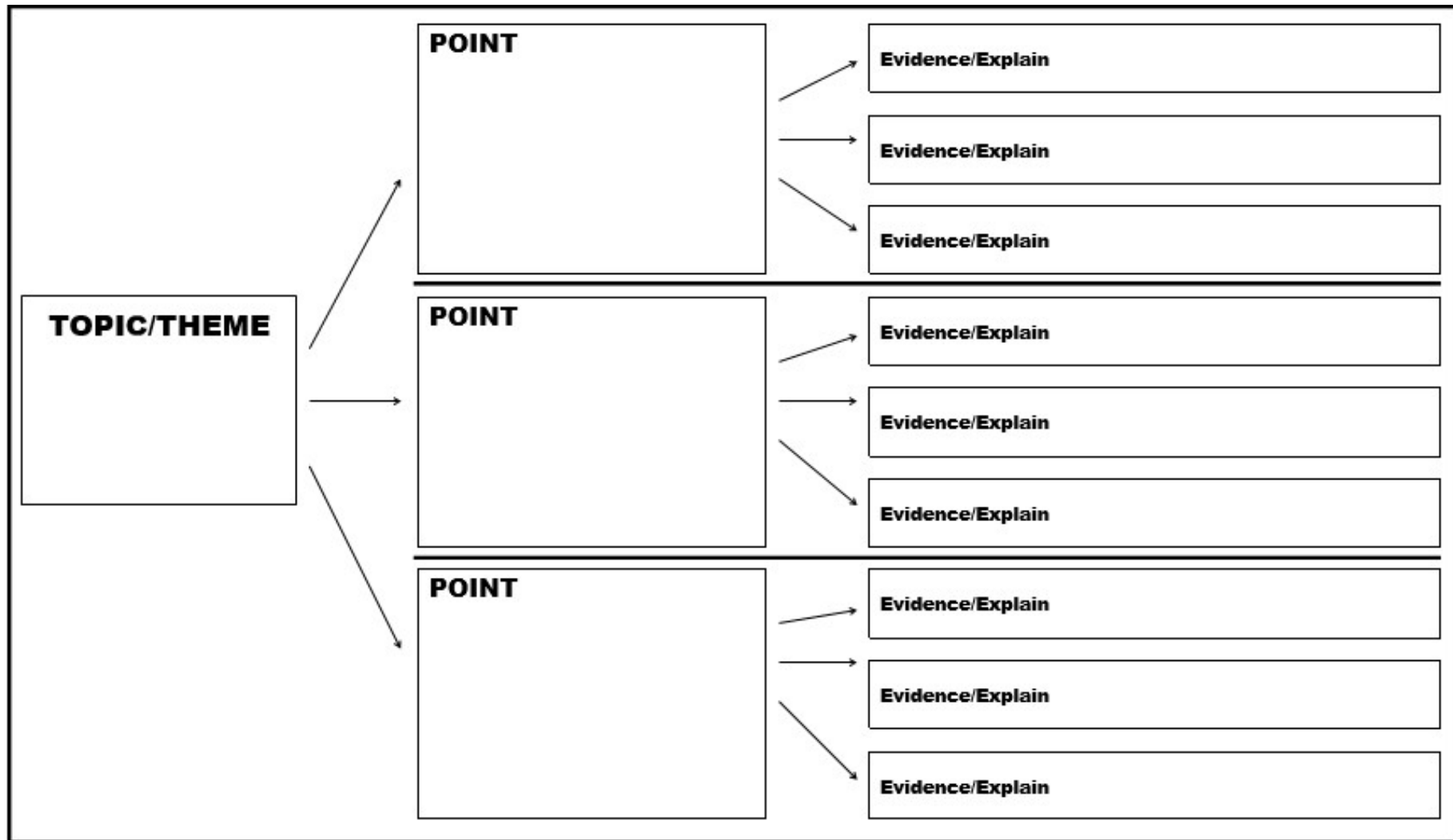
Should be legal	Shouldn't be legal

Q2: Should performance enhancing equipment (Speedo Fastskin ZLR Racer) be banned from professional sport?



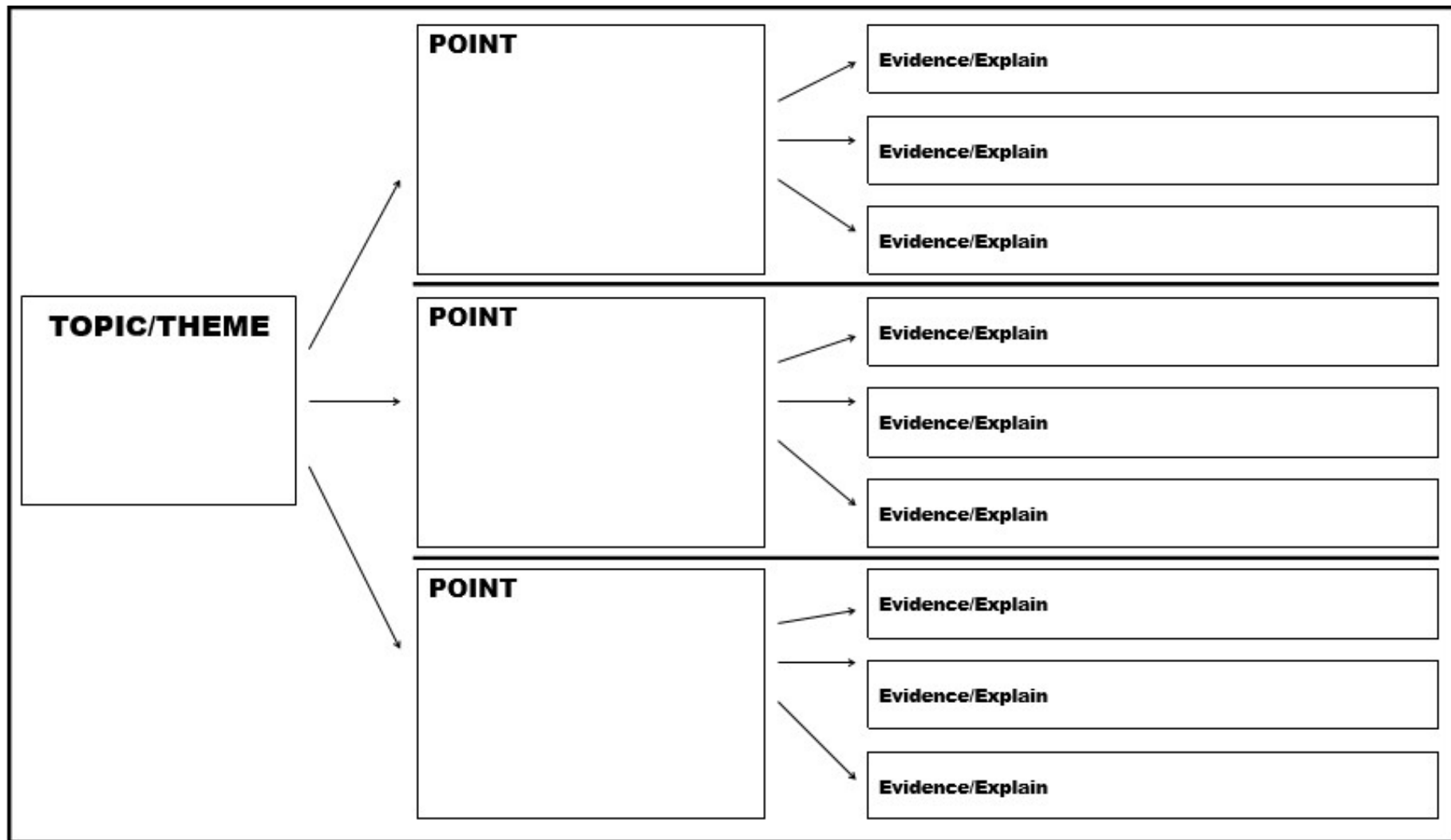
Banned	Not banned

Q3: Should 'performance enhancing' trainers (Nike Alphaflys) be banned from professional sport?



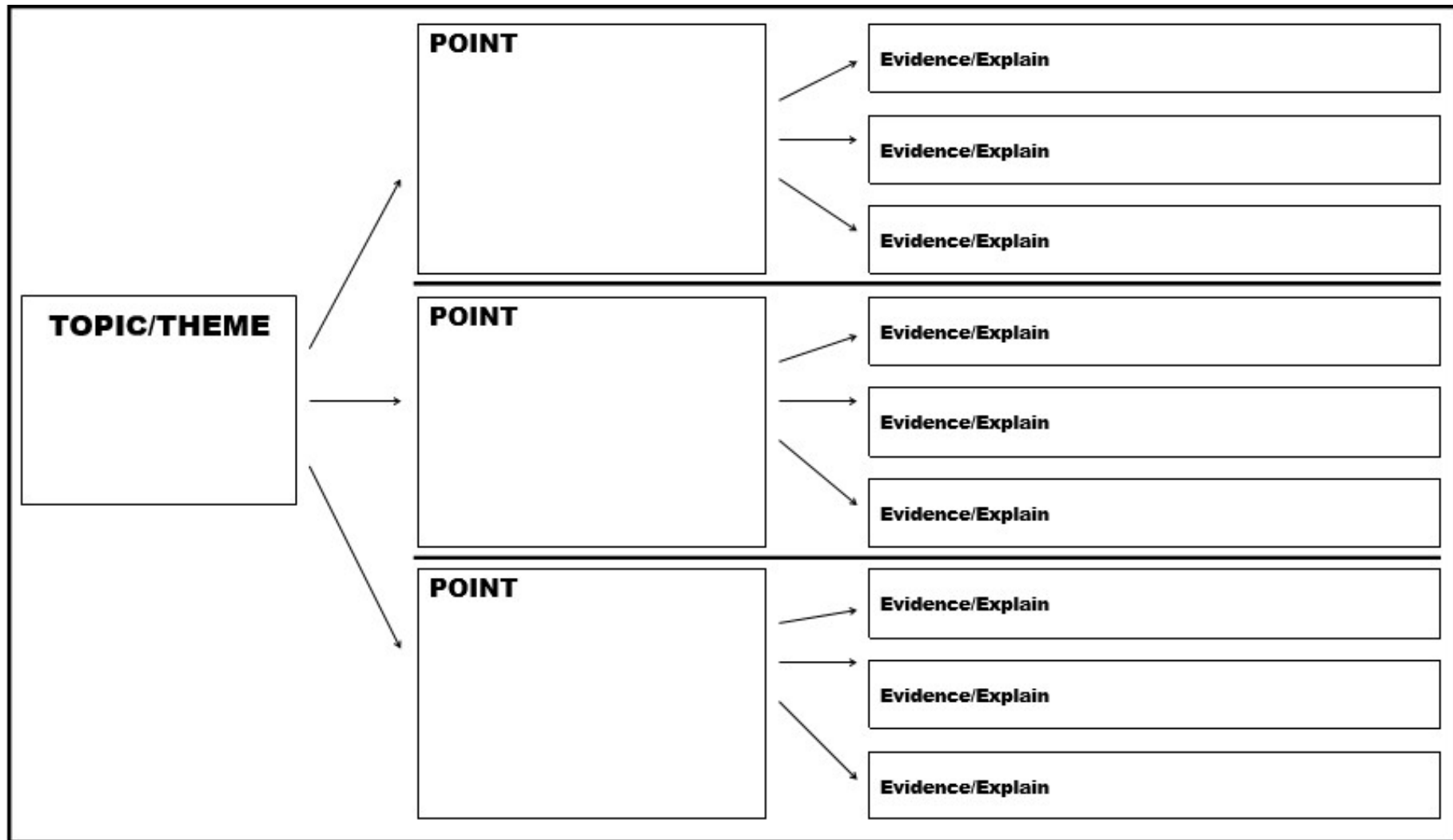
Banned	Not banned

Q4: Should female and male athletes compete against each other?



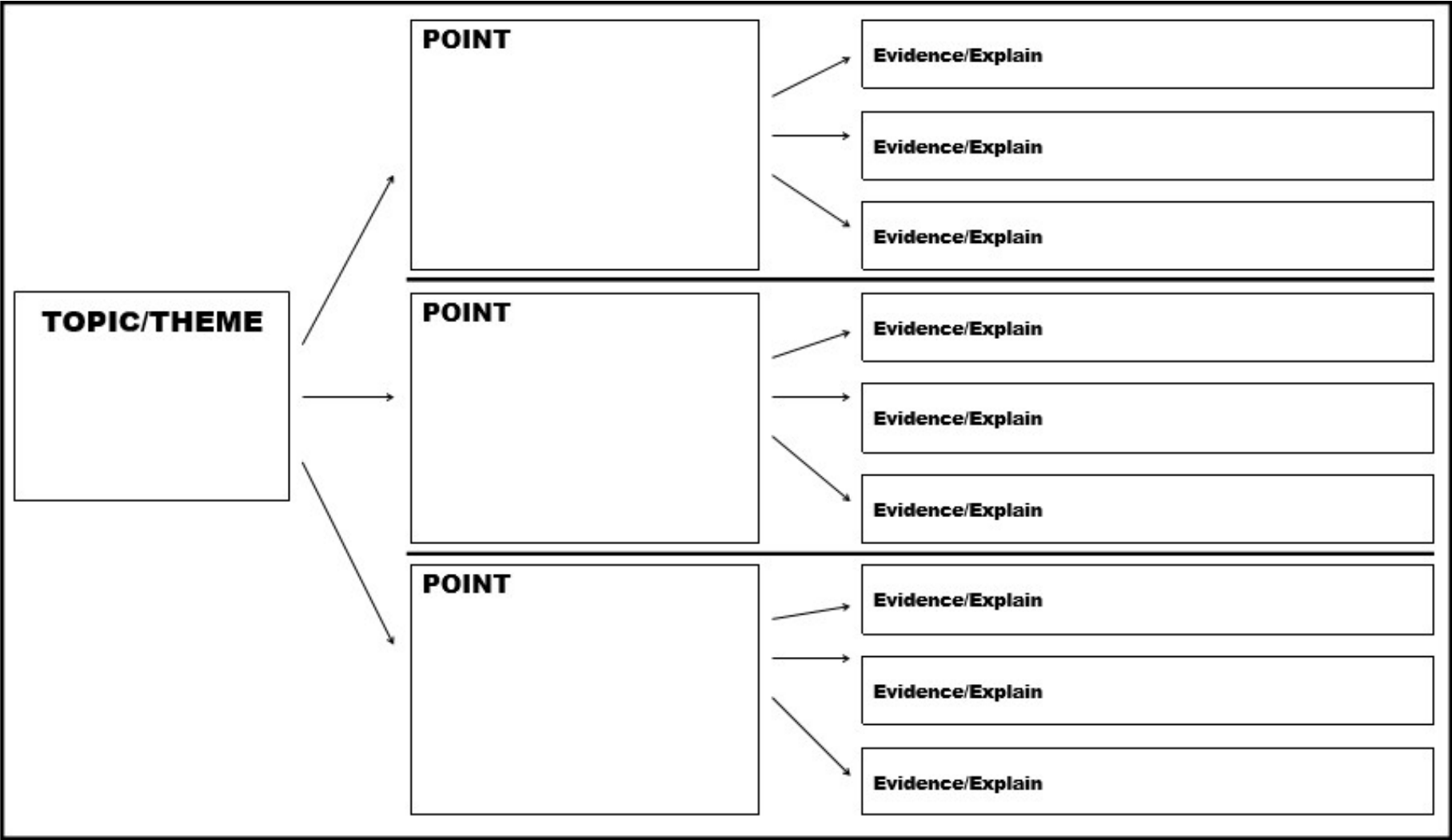
Should compete	Shouldn't compete

Q5: Should female and male athletes receive equal pay?



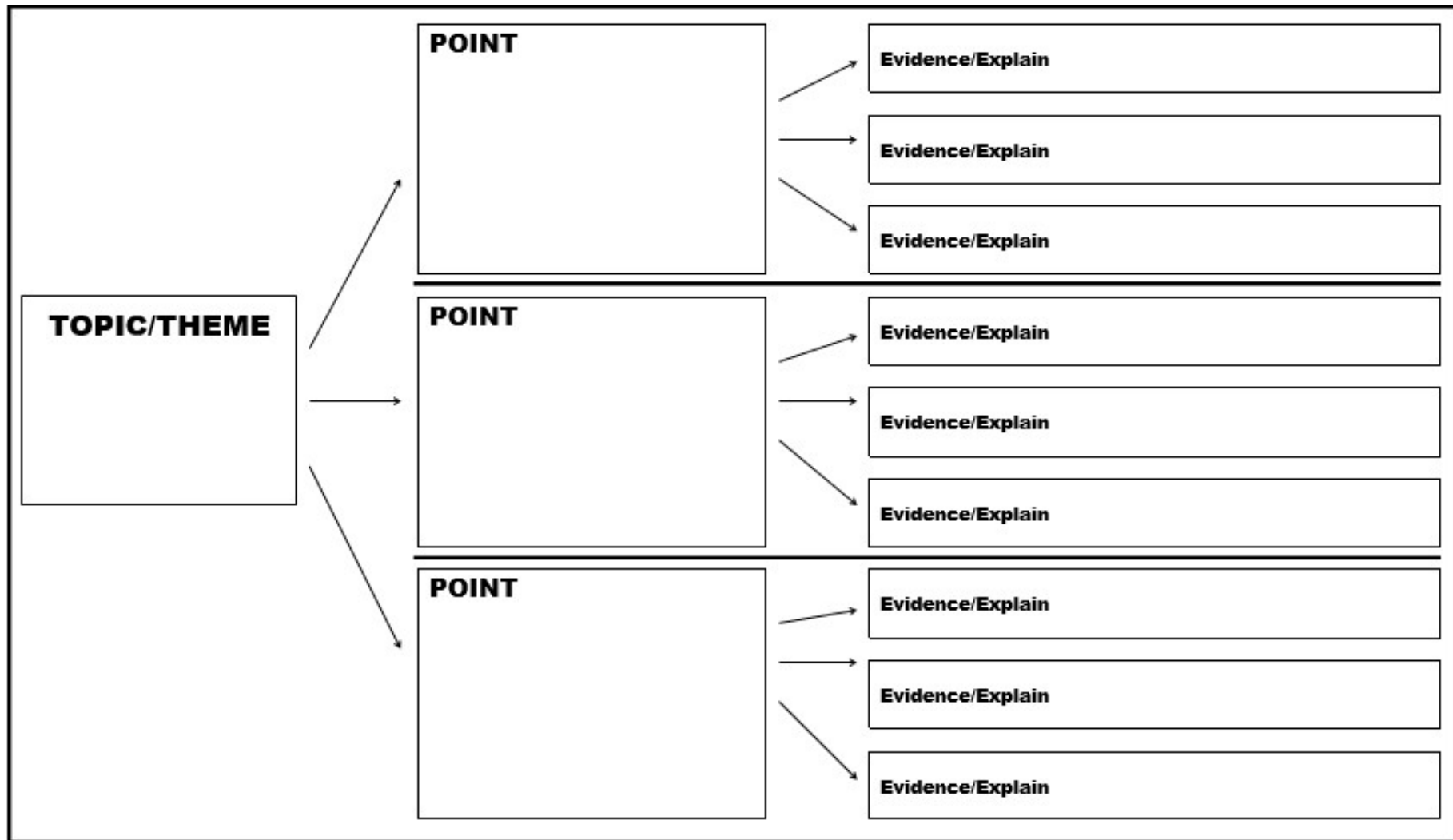
Yes- Equal pay	No- Not equal pay

Q6: Hosting an international event (Olympics, World Cup) is only done for political advantage?



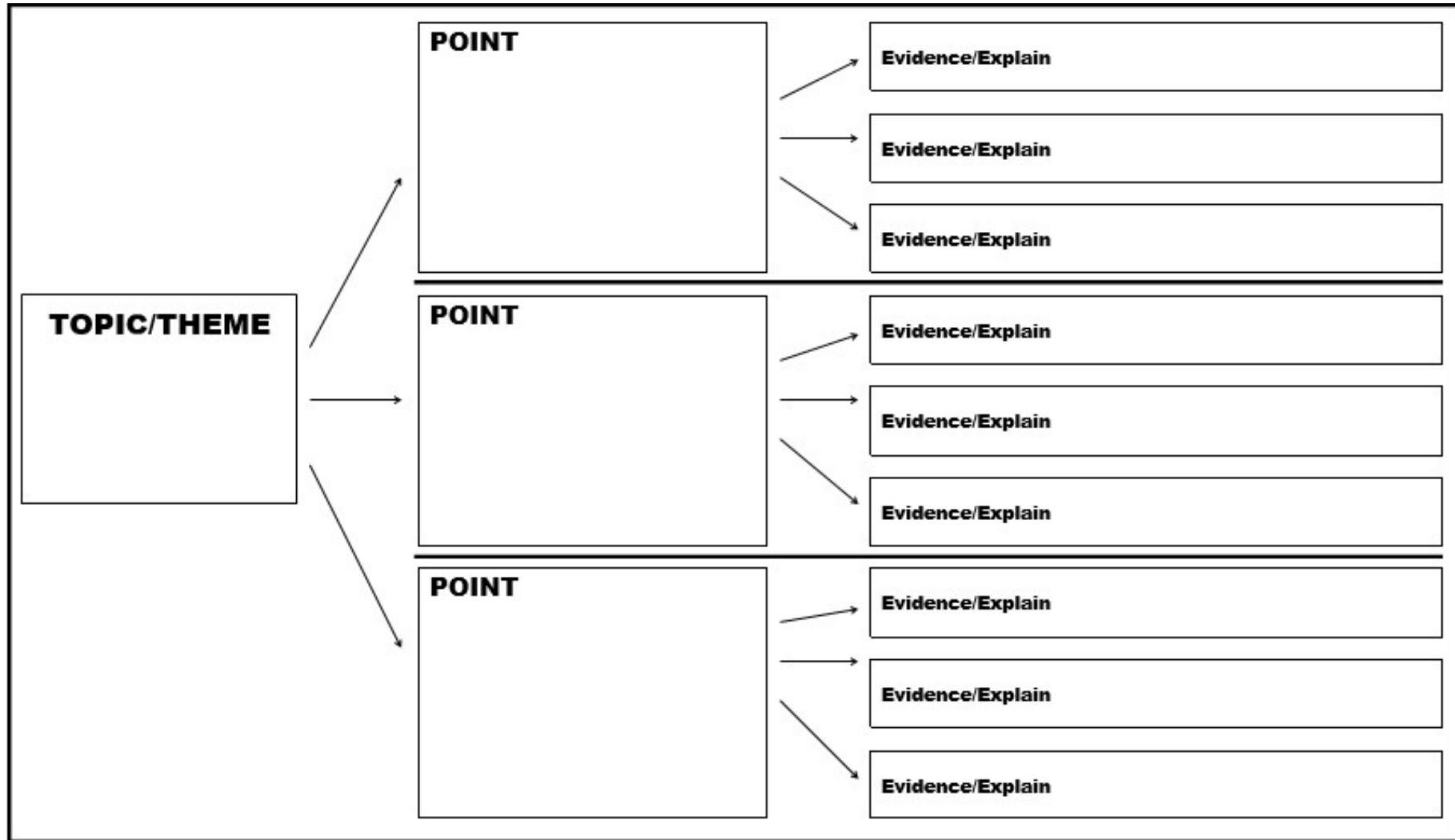
Yes- For political advantage	No- Not for political advantage

Q7: Is VAR ruining football?



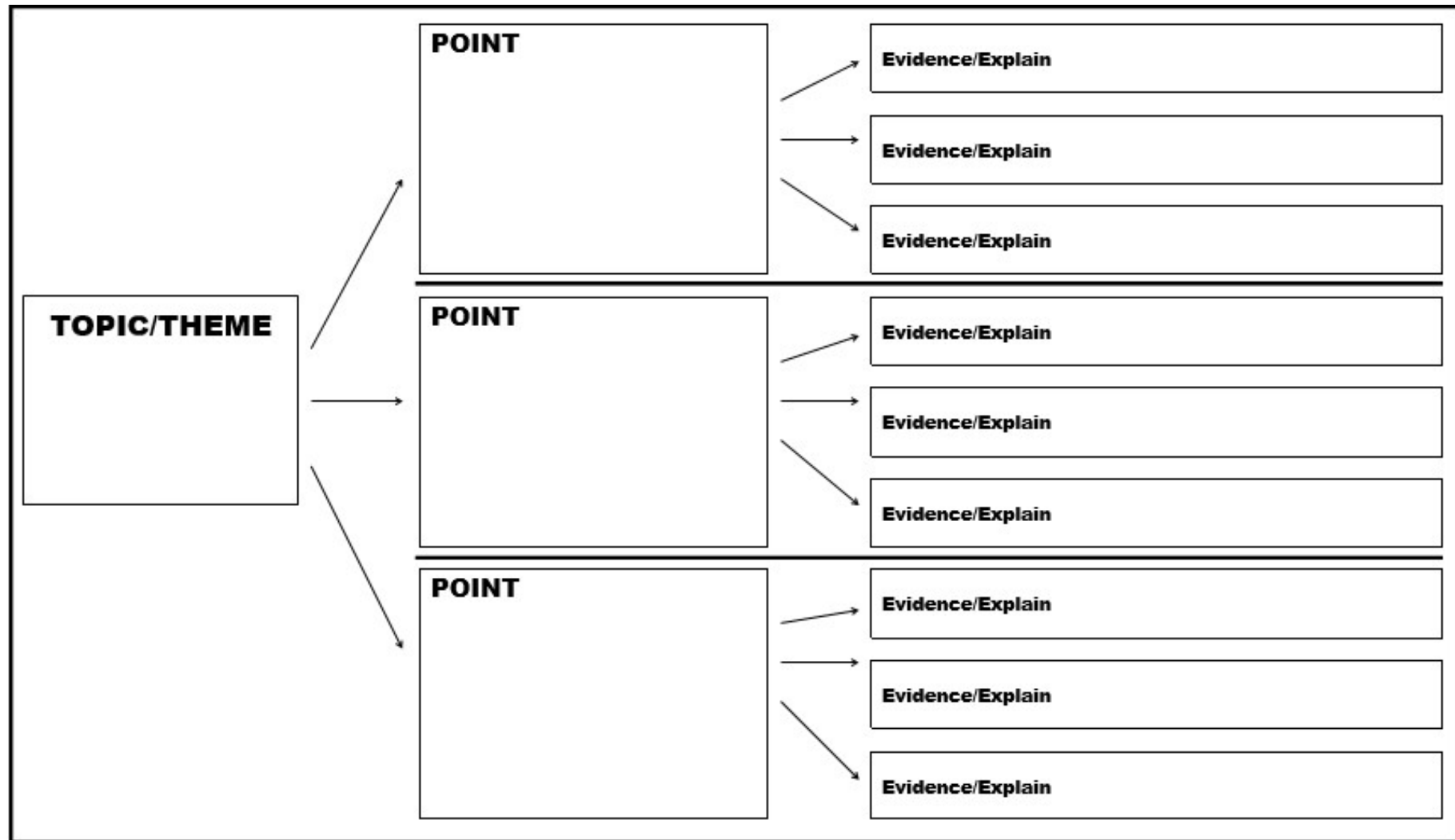
Yes- Remove VAR	No- VAR is an improvement

Q8: Do you agree with Novak Djokovic being disqualified in the 2020 US open for striking the ball at a line judge?



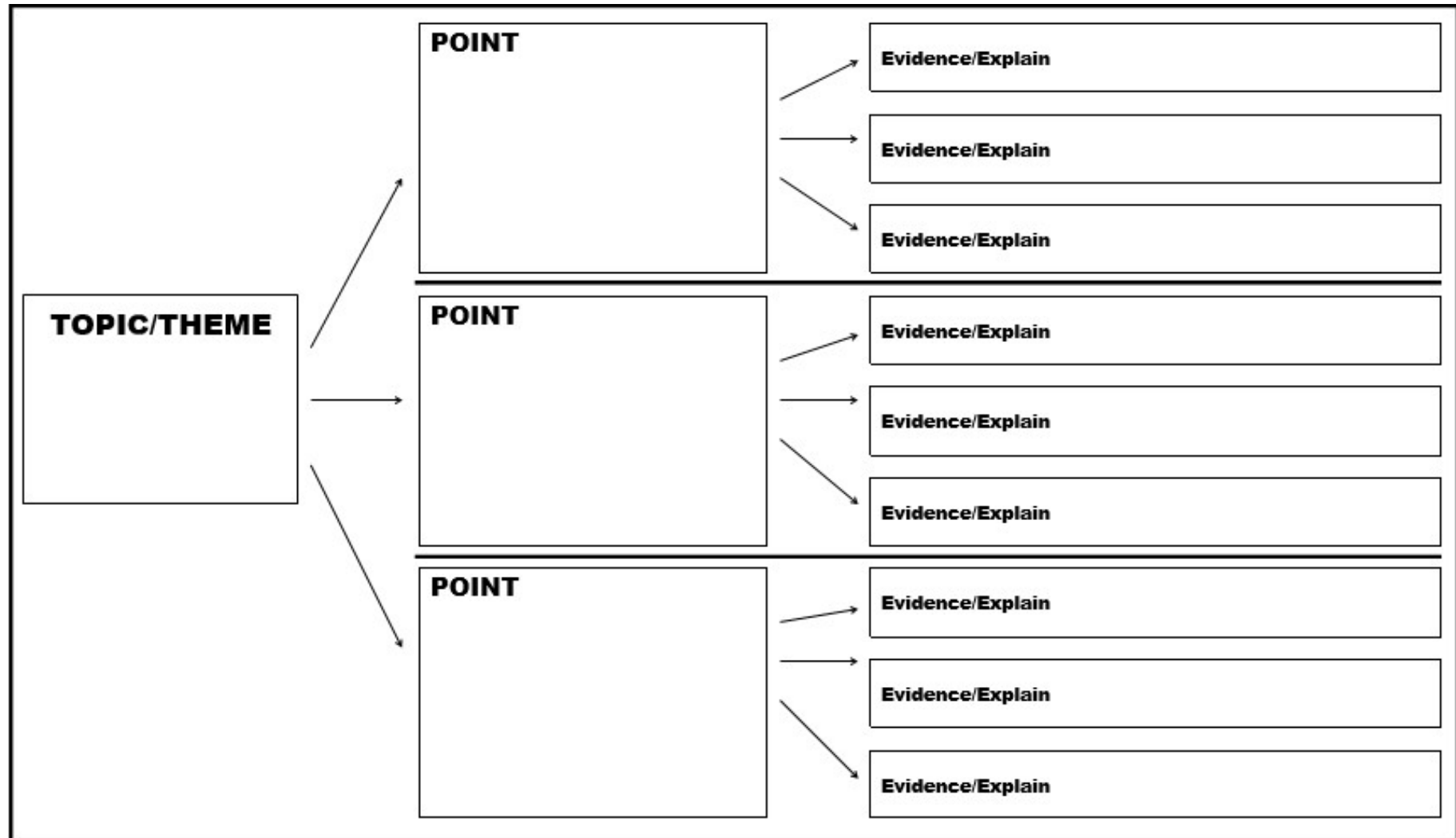
Yes- Should be disqualifeid	No- Shouldn't be disqualifeid

Q9: Do you agree with the technology used to help officiate a game of cricket? (E.G Hotspot, Bails LEDs, Spidercam, and Hawkeye)



Agree- Technology helps	Disagree- Takes away human officials

Q10: Should athletes who have failed WADA's tests be allowed to compete again?



Should not be allowed to compete	Shouldn't be allowed to compete

