

Additional Worksheet for Level 3 BTEC Sport/Sport and Exercise Sciences Graduates

Principles of exercise, fitness and health

Learner name: _____

1. Choose from the following words to fill in the blanks below. Some words may be used more than once:

reduced
increased
brain
gradually
oxygen
blood pooling
lower body

Following exercise _____ can occur. This is when blood diverted to the muscles of the _____ is unable to return to the heart, and pools.

As a result of this there can be a lack of blood and _____ to the _____ which leads to an _____ risk of fainting.

By reducing exercise intensity _____ this risk can be _____.

The rhythmical contraction of the muscles helps to pump the blood back to the heart rather than allow it to pool in the lower extremities.

7 marks

2. Choose from the following words to fill in the blanks below. Some words may be used more than once:

mobile
shock absorption
increase
synovial fluid
osteoporosis
synovial membrane
decrease

During exercise joints become more _____. This is due to a/an _____ in the amount of _____ secreted into the joint by the _____. The cartilage is also able to absorb some _____ and leads to better _____ during activity.

In the long term weight bearing activity can lead to a/an _____ in bone density. This results in a decreased risk of _____.

8 marks

3. Choose from the following words to fill in the blanks below. Some words may be used more than once:

DOMS
stress
inflammation
micro tears

_____ is caused by severe physical _____ to the muscles. It usually develops 24-48 hours after exercise. _____ in the muscle lead to _____, pain and swelling

4 marks

4. Choose from the following words to fill in the blank below:

- isometric
- isokinetic
- concentric
- eccentric

The type of muscle contraction most likely to cause delayed onset muscle soreness (DOMS) is _____

1 mark

5. Complete the table below by adding the components of physical fitness to match the correct definition:

- Flexibility
- Motor skills
- Cardiovascular fitness
- Muscular strength
- Muscular endurance

Component	Definition
	The ability of the body to take in, transport and utilise oxygen
	Comprised of speed, agility, balance, co-ordination, reaction time and power
	The ability of a muscle or muscle group to exert a maximum force against a resistance in one contraction eg 1 rep max
	The ability of a muscle or muscle group to contract repeatedly
	The ability of a joint or joint complex to work to its full range of movement

5 marks

6. Answer true (T) or false (F) to the following statement:

A client's previous experience of exercise can affect their skill-related fitness.

T / F

1 mark

7. Answer true (T) or false (F) to the following statement:

A training programme should be regressed (moved back) if the client is finding it too easy.

T / F

1 mark

8. Choose from the following words to fill in the blank below:

harmful

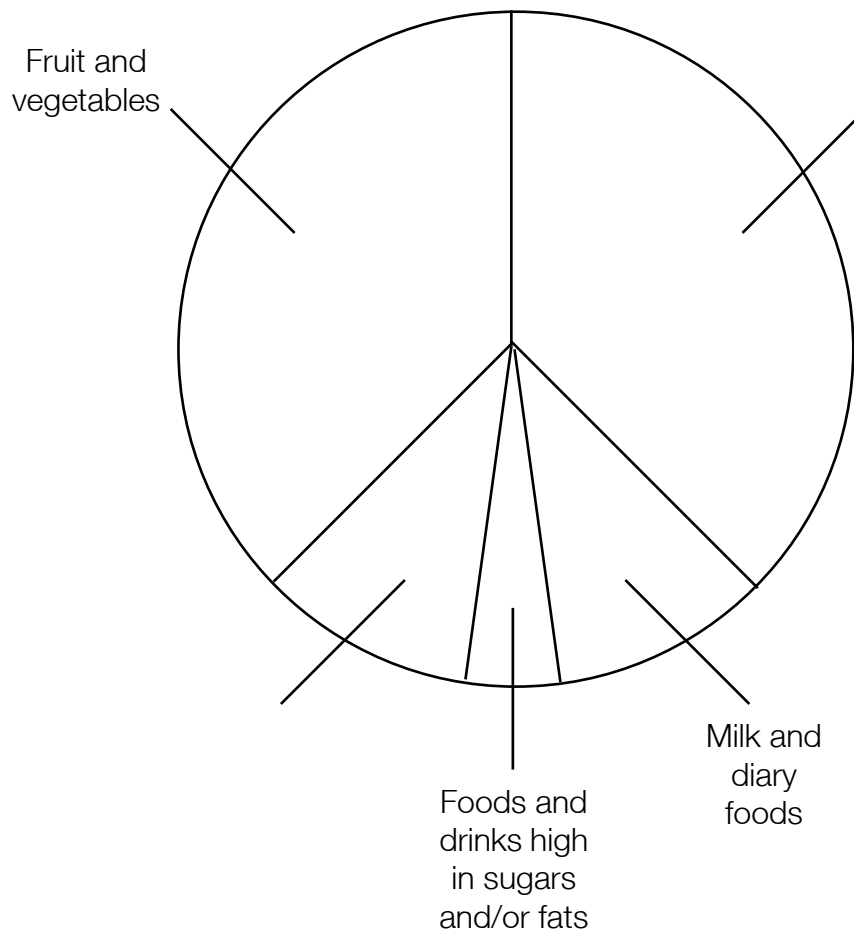
harmless

Exercising at too high a speed can affect posture in a _____ way.

1 mark

9. Complete the food plate below using the labels:

- Bread, rice, potatoes, pasta, other starchy foods
- Meat, fish, eggs, beans, and non-dairy sources of protein



2 marks

21/30 required to pass (70%)

Final result: ____/30 Pass Refer

I confirm that the information in this worksheet is entirely my own work.

Learner signature: _____ Date: _____

Tutor/assessor signature: _____ Date: _____

IQA signature: _____ Date: _____

Additional Worksheet for Level 3 BTEC Sport/Sport and Exercise Sciences Graduates Answers

Principles of exercise, fitness and health

Learner name: _____

1. Choose from the following words to fill in the blanks below. Some words may be used more than once:

Following exercise blood pooling can occur. This is when blood diverted to the muscles of the lower body is unable to return to the heart, and pools.

As a result of this there can be a lack of blood and oxygen to the brain which leads to an increased risk of fainting.

By reducing exercise intensity gradually this risk can be reduced.

The rhythmical contraction of the muscles helps to pump the blood back to the heart rather than allow it to pool in the lower extremities.

7 marks

2. Choose from the following words to fill in the blanks below. Some words may be used more than once:

During exercise joints become more mobile. This is due to a/an increase in the amount of synovial fluid secreted into the joint by the synovial membrane. The cartilage is also able to absorb some synovial fluid and leads to better shock absorption during activity.

In the long term weight bearing activity can lead to a/an increase in bone density. This results in a decreased risk of osteoporosis.

8 marks

3. Choose from the following words to fill in the blanks below. Some words may be used more than once:

DOMS is caused by severe physical stress to the muscles. It usually develops 24-48 hours after exercise. micro tears in the muscle lead to inflammation, pain and swelling

4 marks

4. Choose from the following words to fill in the blank below:

The type of muscle contraction most likely to cause delayed onset muscle soreness (DOMS) is eccentric

1 mark

5. Complete the table below by adding the components of physical fitness to match the correct definition:

Component	Definition
Cardiovascular fitness	The ability of the body to take in, transport and utilise oxygen
Motor skills	Comprised of speed, agility, balance, co-ordination, reaction time and power.
Muscular strength	The ability of a muscle or muscle group to exert a maximum force against a resistance in one contraction eg 1 rep max
Muscular endurance	The ability of a muscle or muscle group to contract repeatedly
Flexibility	The ability of a joint or joint complex to work to its full range of movement

5 marks

6. Answer true (T) or false (F) to the following statement:

A client's previous experience of exercise can affect their skill-related fitness.

T / F

1 mark

7. Answer true (T) or false (F) to the following statement:

A training programme should be regressed (moved back) if the client is finding it too easy.

T / F

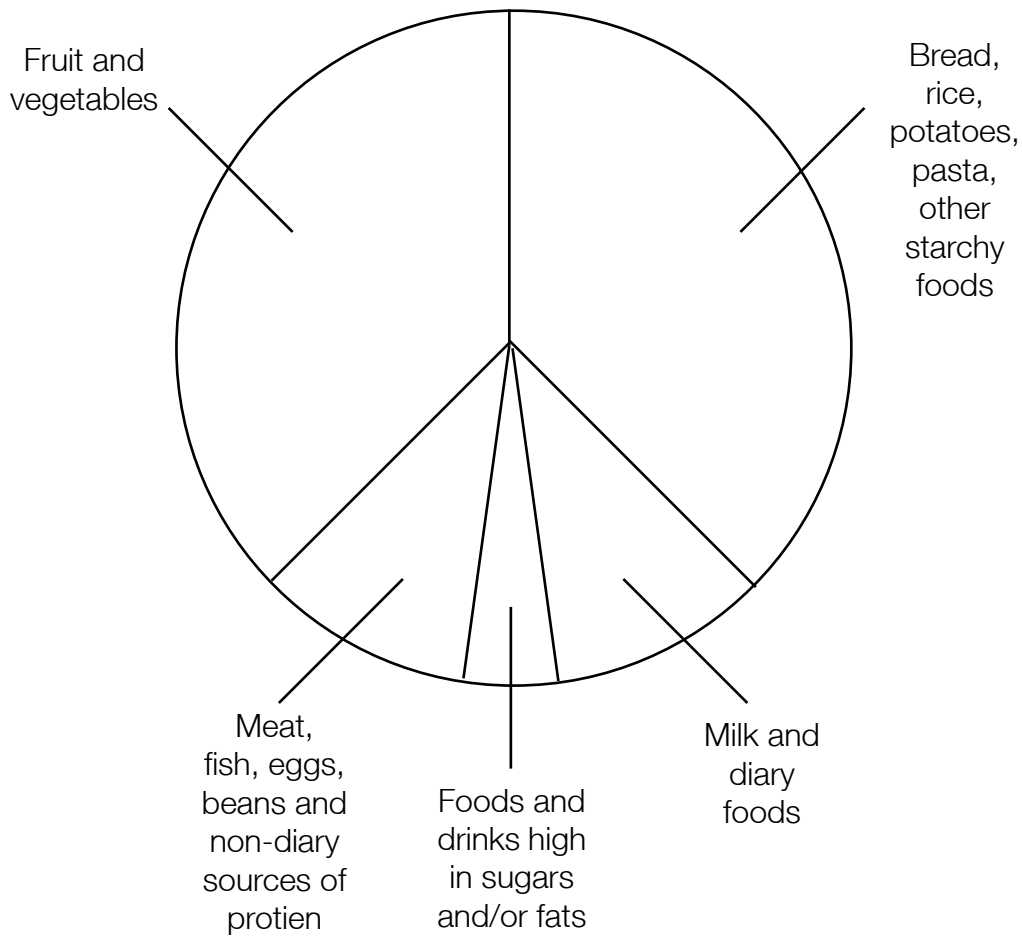
1 mark

8. Choose from the following words to fill in the blank below:

Exercising at too high a speed can affect posture in a _____ harmful _____ way.

1 mark

9. Complete the food plate below using the labels:



2 marks