

Week 1

## Benefits of a Warm Up

There are many benefits of warming up before exercise. The first set of benefits are known as physiological benefits.

**Physiological** - these are benefits to your body. These are physical benefits so you will see or feel them. For example an increase in heart rate.



Week 2

## Physiological Benefit

### Increase in heart rate



Your heart rate is the number of times your heart beats per minute. Before a warm up your heart rate will be at a resting level, during a warm up your heart will start to beat quicker to deliver more blood around the body.

Week 3

## Physiological Benefit

### Increase in blood flow and oxygen to muscles



As your heart beats quicker, more blood will travel around your body. The oxygen in the blood travels to your muscles to make energy. The more energy in your muscles, the longer you can last without getting tired.

PE

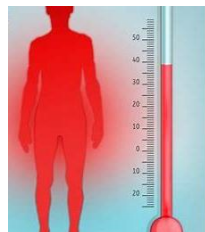
Title: Physiological benefits of a warm up

Week 4

## Physiological Benefit

### Increase in muscle temperature

When you use your muscles, it will generate heat. Therefore, your muscle temperature will increase. Stretching is important during an increase in muscles temperature.



Week 5

## Physiological Benefit

### Increase in flexibility of muscles and joints



As your muscle temperature increases you are able to stretch further. The mobility stage of a warm up means you can move your joints through their full range of movement. The dynamic stretching stage means you can stretch your muscles further.

Key words:

**Physiological** – linked to your body, these are benefits you will feel or see.

**Heart rate** – how many times your heart beats per minute.

**Flexibility** – range of movement possible.

## Week 1



Questions	Answers
What are physiological benefits?	Benefits to your body
How do you know they are physiological benefits ?	You will see them or you will feel them.

## Week 2

Questions	Answers
What is a physiological benefit of a warm up?	Increase in heart rate
What is your heart rate?	Number of times your heart beats per minute.
Before a warm up what is your heart rate known as?	Resting heart rate
What happens to your heart rate during a warm up ?	It will start to beat quicker
What happens when your heart beats quicker ?	More blood is pumped around your body.

## Week 3

Questions	Answers
What is a physiological benefit of a warm up?	Increase in blood flow and oxygen to your muscles.
Where does oxygen travel to in a warm up?	Your muscles
What does oxygen help to make in your muscles?	Energy
With more energy in your muscles – what does that mean ?	You will be able to last longer when you exercise.
What happens when your heart beats quicker ?	More blood and oxygen is pumped around your body.


**Year 7 PE : Topic 2**  
**Title: Physiological benefits of a warm up**


## Week 4

Questions	Answers
What is a physiological benefit of a warm up?	Increase in muscles temperature.
What happens when you use your muscles?	It generates heat.
What is important as your muscles get hotter?	Stretching

## Week 5

Questions	Answers
What is a physiological benefit of a warm up?	Increase in flexibility of muscles and joints.
As your muscles get hotter, what can you do?	Stretch further.
How does the mobility stage of a warm up help ?	You can move your joints through a full range of movement.
How does dynamic stretching help ?	Stretch your muscles further.

### Key words:

**Physiological** – linked to your body, these are benefits you will feel or see.

**Heart rate** – how many times your heart beats per minute.

**Flexibility** – range of movement possible.