

BTEC Tech Sport Knowledge Organiser – Component 1C.1

Stages of a warm up

Stage	Definition
Pulse Raiser	An activity that gradually increases in intensity. Done at the start of a <u>warm up</u> .
Mobilisers	Activities that take joints through their full range of movement.
Preparation stretches	Activities to stretch the main muscles that will be used in the physical activity/sport. These stretches can be dynamic stretches or static stretches.



Response of the Cardiorespiratory System

Stage	CR Response
Pulse Raiser	Increased heart rate, increased breathing rate, increased depth of breathing.
Mobilisers	Heart rate and breathing rate reduce due to drop in intensity.
Preparation Stretches	Static: Heart rate and breathing rate reduce due to drop in intensity. Dynamic: Heart rate and breathing rate remain elevated due to movement occurring.



Response of the Musculoskeletal System

Stage	MS Response
Pulse Raiser	Increased temperature of muscles, increased muscle pliability, reduced risk of muscle tear/muscle strain.

Supporting Participants in a <u>Warm up</u>	
How to support participants?	Definition
Observing participants	The coach needs to position themselves so they can observe participants so they can check if they are using appropriate technique.
Providing Instructions	Instructions need to be clear so that participants know what to do in each stage of the <u>warm up</u> .

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Adapting a <u>Warm up</u>	
How to Adapt	Definition
Intensity	Intensity is how hard the body works during exercise. This can be increased by moving faster or by using more muscles.
Impact	Impact means how much force is travelling through limbs that impact the ground. Impact can be increased or decreased by choosing high impact or low impact exercises.
Timing	Longer <u>warm ups</u> are more suitable for beginners, participants with a low fitness level or adults over 50 years old.
Types of stretch	Static stretches are more suitable for beginners. Dynamic stretches are more suitable for moderate to advanced participants.
Specific to sport/physical activity	The <u>warm up</u> should be specific to the sport/physical activity. This is done through matching the equipment, movements and muscles used to the sport/physical activity.

Organising a <u>Warm up</u>	
Organisation	Definition
Space	How big does the space need to be?
Equipment	What equipment is needed in the <u>warm up</u> to make it specific to the sport/physical activity?
Participants	How many participants? Where should they work?
Timing	How long will each stage of the <u>warm up</u> last? What is the total length of the <u>warm up</u> ?
Demonstrations	Who will provide demonstrations?
Positioning	Where will the leader stand to ensure they can see all participants to be able to check their technique.