

The Tallis Circuit

Each week while school is closed you will be given a circuit to complete at home during your practical PE lessons. All of these exercises will be able to be done with no equipment, however you may wish to make some exercises harder by adding something which you should be able to find around your home e.g. a tin of food/ bottle of water. You will be given one circuit per week and you should repeat this every time you should have a lesson that week. We will also include some theory elements as we go along to give you an understanding of why the circuit is as it is.

Safety aspects

Before you start any type of exercise you should consider some safety aspects. These include:

- Having a drink nearby so that you can stay hydrated.
- Ensuring you are wearing suitable clothing– your PE would be great for this. If you do not have this firstly please make sure that once you get back to school you bring this home and wash it, but secondly you can wear some leggings/ joggers, a t-shirt and some trainers (please make sure that these are clean so that you do not get footprints/ dirt on the carpet/ wherever you have decided to complete your workout!)
- If you take any medication please have this handy ,as you would for your PE lesson, e.g. if you are asthmatic make sure your asthma pump is handy.
- Always complete a warm-up. An example of a warm-up is below.
- Always complete a cool down. An example of a cool down is below.
- If you are finding the exercises too hard take a rest. The intensity of your workout should be appropriate.
- If you have an existing injury don't push yourself too far and if you need to adapt the circuit to suit you do so, e.g. if you have injured your wrist doing press-ups is not going to help it. You may also chose to tape or brace to support injuries (speak to people at home if this is something you think you should do).
- Make sure you are following the advice about the correct technique. If you are not doing the correct technique the exercise may be pointless or even worse you could injure yourself.
- You should allow yourself appropriate rest and recovery between your sessions. If you keep to doing these sessions during your scheduled practical PE lesson time you will be fine, however if you chose to increase the amount of exercise you will need to consider this.
- You also need to make sure that you have enough room to complete the exercises without hitting anyone else, the wall or anything that could get broken.

Circuit training information

Circuit training is a flexible form of training that can be organised in a way to train different components of fitness or to train a specific aspect e.g. you could train different components that are needed by a footballer e.g. speed, power and muscular endurance or you could focus on skills such as dribbling a football.

Circuit training can be completed in a small space with no/ limited equipment and this is why we have chosen to use this type of training. It is also easy to adapt so if you think the session is too hard/ easy you can adapt this yourself by increasing/ decreasing the time you spend on each station.

Circuit training works by having different exercises (each of these is called a station) which are organised in a certain order, so that the same muscles are not working continuously, otherwise this could lead to fatigue. At each station you will work for a period of time followed by rest. This is called your work to rest ratio. The period of time you work for and the amount of rest you have will change weekly to show progression and overload.

Progression and overload are some of the principles of training which need to be considered whenever you create a training programme.

Equipment

Stopwatch– this can be your phone or a clock with a second hand. If you do not have one of these you can count or ask someone to count for you.

These sessions have been created so that they are easy to do at home without equipment, but you may wish to look at the circuit prior to completing it to see if you would like to try some of the progressions, in that case you may need some equipment.

Warm- up

All warm-ups start with a pulse raiser and follow with some stretches. The pulse raiser is an activity that increases your heart rate along with your breathing rate. This will also increase your body temperature and means that more oxygen is getting to your working muscles which means you will have more energy. The next stage is stretching. There are two types of stretches we will do: static and dynamic. Static stretches are when you hold to stretch still and dynamic stretches are when you are stretching whilst moving. These stretches take the joint through the full range of motion. By stretching you increase the range of movement available at the joint and this means that after stretches you should be able to move your joint further. A warm up also prepares you mentally for exercise. If you do not complete a warm up it can lead to injury, which could leave to reversibility.

Let's get moving!

The session this week will focus on the fitness component called cardiovascular endurance. This is the ability of the heart and lungs to supply oxygen to the working muscles. Cardiovascular endurance is required in sport when you are performing for a long period of time using your aerobic energy system. An example of an athlete that would use this fitness component is a marathon runner, however games players also use this component of fitness. This means that you all need to work on this component because it is used during most PE lessons including when we play netball, hockey or football.

We need to start with a warm up.

Pulse raiser:

- 30 seconds jog on the spot or around the room.
- 30 jumping jacks– make sure that you plant your feet firmly on the ground during the inwards and the outward phase of the jumps. Your arms should move right the way up to your head on each jump.
- 30 seconds jog on the spot or around the room.
- 30 jumping jacks– make sure that you plant your feet firmly on the ground during the inwards and the outward phase of the jumps. Your arms should move right the way up to your head on each jump.
- 20 seconds sprint on the spot.
- Repeat.

Static stretches (these should all be held for 5-8 seconds before swapping sides)

- Deltoid stretch (this is the stretch that you all do when you see us coming!). Your deltoid is the muscles that sit over your shoulder. If you cannot feel this stretch push the shoulder you are stretching down.
- Tricep stretch. This is the muscle on the back of your arm. If you cannot feel this stretch pull the elbow of the arm you are stretching towards your other arm.

- Side stretch. This will stretch your obliques and your latissimus dorsi. You obliques are either side of your abdominals and your latissimus dorsi is just above your waist but on your back. If you cannot feel this stretch reach up before reaching over to the side.
- Quadricep stretch. This stretches the big muscles on the front of your thigh. The quadriceps are a group of 4 muscles but you don't need to know their individual names until a level! If you are struggling to balance focus on something that isn't moving, or hold the lobe of your opposite ear! Don't believe me, try it!
- Hamstring stretch. This is the big muscle at the back of your thigh. If you cannot feel this stretch lift your toes up. Towards your face This type of movement is called dorsi flexion.
- Gastrocnemius stretch. This stretches your calf muscle. If you cannot feel this stretch you need to push the heel of your back foot into the ground. This stretch is not about how far you can get your legs apart it's about stretching that gastrocnemius muscle.

Dynamic stretches:

- 30 High knees. Lift one knee as high as you can. Swap legs and bring the opposite knee up as high as and as quickly as you can. This will stretch your gluteals (your bum).
- 30 heel flicks. Bring one foot up to your bottom. Swap legs and try to kick your bottom. Don't do this too hard. This will stretch your quadriceps.
- 6 lunges. Making sure that your back leg is flexed (bent) to 90 degrees. You should be able to see your toes over your front knee. Your back knee should not be on the floor and your arms should be by the side of your body. Do not put your arms and therefore your weight on your front knee as this can cause injury. Hold each lunge for three seconds before switching legs. This will stretch your quadriceps.

The main session- You may want to play some music to help you through this

Each of these stations (exercises) should be completed for 30 seconds with a 30 second rest in between. During this 30 second rest you should get ready to start the next station. Once you have been round all the stations you should have a 2 minute rest and have a quick drink of water. You should then repeat the entire circuit twice if you are in year 7 or 8 and three times if you are in year 9, 10 or 11. If you find this easy increase the time you are working e.g 45 seconds.

Station 1- mountain climbers

- Start in a press up position, making sure your back is straight.
- Pull one of your knees up into your chest.
- Then quickly switch and pull up your other knee.
- Continue to switch legs at a pace that suits you.

Progressions- Place a pillow on your back and see if you can complete the station without it falling off. Can you go faster?

Station 2- jumping jacks

- Start in a relaxed stance, legs together and arms by your side.
- Jump both legs out to the side and at the same time raise the arms out sideways to above head height.
- Jump back in to the starting position.
- Make sure that you push your heels into the ground every time you move your feet.

Progressions- Hold a tin of beans in each hand. Change this to star jumps (making a star in the air rather than on the ground)

Station 3- burpees

- Start standing up, feet shoulder width apart and your arms by your side.
- Lower your body down so that you can place your hands on the floor.
- Jump your feet backwards so that you're in a press up position.
- Jump your feet back in towards your feet.
- Reach your arms over your head and jump up into the air.
- Repeat.

Progressions- Can you do a press up while you're in the press up position? Can you do a star jump as you jump up rather than a straight jump? Can you go faster?

Station 4 -side to side jumps

- With two feet together, jump side to side, with soft knees when landings.
- Use your arms to help you jump.
- Imagine there is a line that you're jumping over. (this is similar to a speed bounce if you have ever done this).

Progressions- You could add in a jump forwards and backwards after your side to side jump. E.g. Left side, right side forwards-backwards (repeat). You could place a tin on the floor and jump over this.

Station 5- air punches

- Make sure your feet are shoulder width apart.
- Look straight ahead.
- Keeping your elbows in & hands under your chin, punch your arms out directly in front of you, keeping the elbows soft.

Progressions- place a tin in each hand.

Station 6- high knees

- Lift one knee as high as you can.
- Swap legs and bring the opposite knee up as high as and as quickly as you can.
- Repeat.

Progressions- can you go faster?

Station 7- lunges

- Making sure that your back leg is flexed (bent) to 90 degrees.
- You should be able to see your toes over your front knee.
- Your back knee should not be on the floor and your arms should be by the side of your body.
- Do not put your arms and therefore your weight on your front knee as this can cause injury.
- Hold each lunge for a second before switching legs..
- Repeat.

Progressions- as you switch your legs can you jump?

Station 8—step ups

• You will need to use a bottom step for this station. If you do not have a step that you can use read the adaptation below.

- Start with both feet on the floor.
- Place one foot on the step. Make sure that your foot is fully on the step.
- Bring your second foot onto the step to join it. Make sure that your second foot is fully on the step.
- Take the first foot off the step and place it on the floor.
- Take the second foot off the step and onto the floor.
- Repeat as fast as you can.
- If you do not have a step lift one foot off the floor. In front of you about step height.
- Then swap legs to bring the other foot off the floor.
- Repeat as fast as you can.

Progressions- switch feet as quickly as possible so that you only have 1 foot on the step at a time.

Station 9- heel flicks

- Bring one foot up to your bottom.
- Swap legs and try to kick your bottom. Don't do this too hard.
- Repeat.

Station 10- squats

- Stand with your feet shoulder width apart.
- Push your bottom backwards (like you are sitting on a toilet) and flex (bend) your legs.. Keep your heels on the floor.
- Extend (straighten) your legs.
- Repeat.

Progressions- after you have flexed (bent) your knees jump up and extend (straighten). When you land flex (bend) your knees again. This is also known as a jump squat.

Well done!

Don't forget to have 2 minutes rest and to drink some water.

Then repeat the whole circuit twice if you are in year 7 or 8 and three times if you are in year 9, 10 or 11.

Cool down

The purpose of a cool down is to maintain an elevated breathing and heart rate before gradually reducing the breathing and heart rate to its resting state. If you do not do this gradually it can lead to light-headedness and sickness.

- To do a gradual cool down slowly jog on the spot/ around the room for a minute. Reduce your speed for another minute. Then slowly reduce this to a walk for another minute Your heart beat should begin to slow down.

The next stage of a cool down is stretching By stretching the muscles you have worked you will reduce the amount you will ache within the next 48 hours. This ache is called Delayed Onset of Muscular Soreness also known as DOMS. If you do not stretch you will ache over the

next couple of days, if you stretch you will ache less. The more times you do the circuit the easier you will find it and the less you will ache afterwards. By stretching you also allow the body to remove waste products such as lactic acid and carbon dioxide.

We will do the same stretches as in the warm up but this time they need to be held for 30 seconds.

- Deltoid stretch (this is the stretch that you all do when you see us coming!). Your deltoid is the muscles that sits over your shoulder. If you cannot feel this stretch push the shoulder you are stretching down.
- Tricep stretch. This is the muscle on the back of your arm. If you cannot feel this stretch pull the elbow of the arm you are stretching towards your other arm.
- Side stretch. This will stretch your obliques and your latissimus dorsi. Your obliques are either side of your abdominals and your latissimus dorsi is just above your waist but on your back. If you cannot feel this stretch reach up before reaching over to the side.
- Quadricep stretch. This stretches the big muscles on the front of your thigh. The quadriceps are a group of 4 muscles but you don't need to know their individual names until a level! If you are struggling to balance focus on something that isn't moving, or hold the lobe of your opposite ear! Don't believe me, try it!
- Hamstring stretch. This is the big muscle at the back of your thigh. If you cannot feel this stretch lift your toes up. Towards your face This type of movement is called dorsiflexion.
- Gastrocnemius stretch. This stretches your calf muscle. If you cannot feel this stretch you need to push the heel of your back foot into the ground. This stretch is not about how far you can get your legs apart it's about stretching that gastrocnemius muscle.

Well done you have completed your first circuit training session. This session is meant to be hard as it is focussing on cardiovascular endurance. If you found this really hard do not panic. You can adapt the work to rest ratio the next time you complete the circuit. If you found it easy well done! Don't forget to make it harder next time. Remember it is important that you challenge yourself, no-one needs to know if you made it easier/ harder, but to see results and to experience the short and long term effect of exercise you need to try your best.