



# **STRENGTH** **AND** **BALANCE** **EXERCISES**





## STRENGTH AND BALANCE EXERCISES

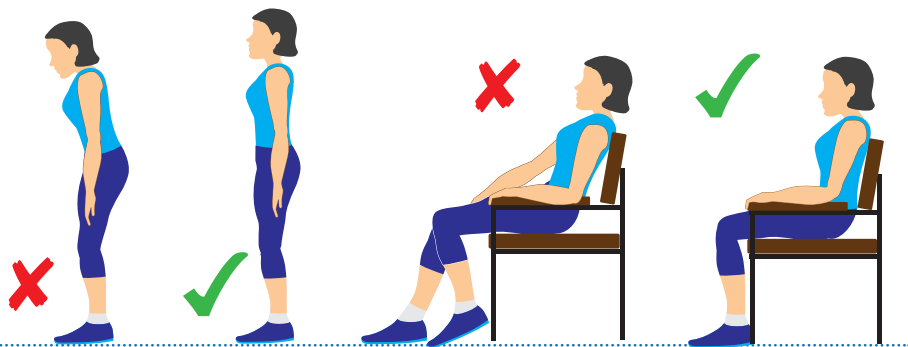
Strength and balance exercises will improve your balance and muscle strength as well as your general fitness and well-being. These exercises need to be continued for at least 12 weeks or for as long as you are able to continue. They need to be performed 3 times every week but can be divided up so you do not have to do them all at the same time. You may feel a bit stiff after you first start to exercise which is quite normal. This is because you are using muscles which may not be used to exercise. It is important that you keep on exercising. The stiffness will leave as your body gets used to the exercises.

When you begin these exercises you are advised to hold on to something stable like a work-top or solid table unless otherwise instructed. If illness stops you from maintaining the exercise programme, check with your doctor or Physiotherapist or Instructor before starting again. Stop the exercises and contact your doctor if you experience dizziness, chest pain or severe shortness of breath while exercising.

If you have any questions about the exercise programme please do not hesitate to contact:

# POSTURE

A good posture allows your body to work more efficiently. It is useful to have a clear mental picture of good posture and remember it at all times especially when exercising.



## WARM UP EXERCISES

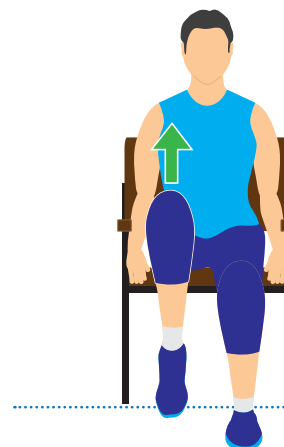
It is important to get your body ready for exercise. These warm up exercises will get your heart, joints and muscles prepared. You must start these slowly and gradually increase the speed you perform them. The warm up must last for at least 4 minutes. Perform each warm up exercise for approximately 30 seconds and then move straight to the next. Repeat all a second time.

At all times sit tall towards the front half of your chair with legs hip width apart and feet resting on the floor. Keep your breathing regular and begin with small movements gradually making them bigger.



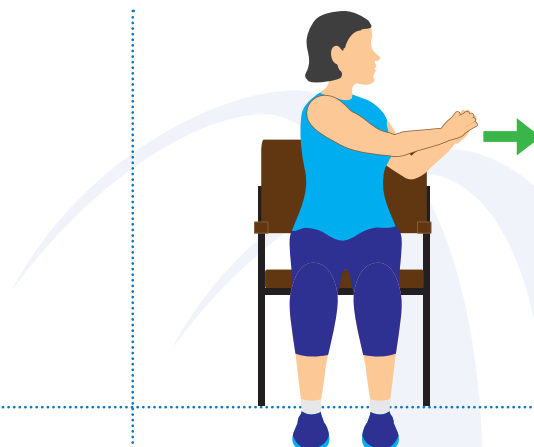
### 1. Marching Arms

With both elbows bent and in a comfortable position march arms alternatively forwards and backwards.



### 2. Marching Legs

Lift alternate knees.



### 3. Side Claps

Keep both thighs firmly on the seat, reach out to the side and clap hands at a level which is comfortable. Turn and clap to other side.



### 4. Toe Taps

Take half a step forward with one foot and tap the toes on this foot 10 times. Repeat on other foot.



### 5. Heel Taps

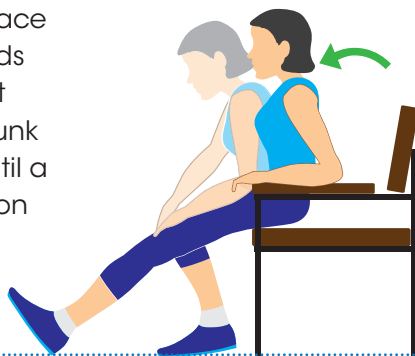
Take a small step forward with one foot and tap heel 10 times. Repeat on other foot.

## STRETCHES

Gradually ease into every stretch. All can be repeated 2-3 times.

### 1. Back of Thigh Stretch

Straighten one leg out in front and place heel on floor with toes pointing towards ceiling. Place both hands above bent knee to support back. Keeping the trunk straight bend forward from the hip until a stretch is felt in the back of the thigh on the straight leg. Hold for 10 seconds, release and repeat on other leg.



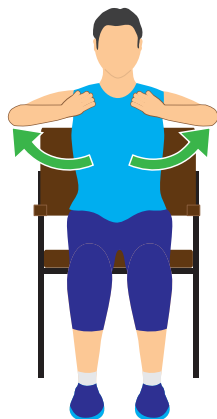
### 2. Calf Stretch

Straighten one leg out in front and place heel on the floor. Slowly curl toes towards body and hold for 10 seconds, release and repeat on other leg.



### 3. Chest Stretch

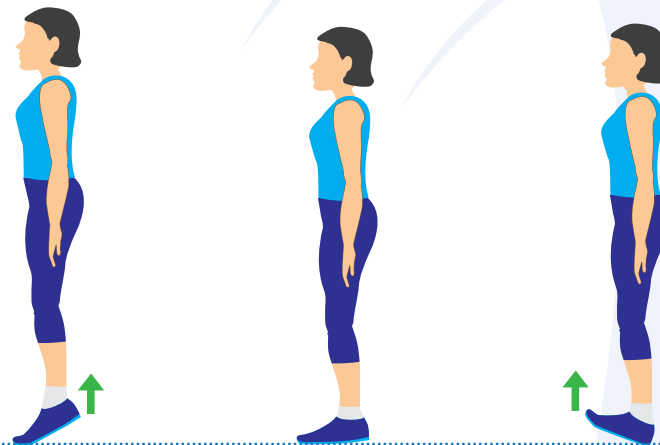
Place both hands lightly on the shoulders. Raise the elbows upwards as far as feels comfortable. Draw the elbows back squeezing the shoulder blades together. Hold for 10 seconds and release.



March your arms and legs at the same time for a further 2 minutes after these stretches.

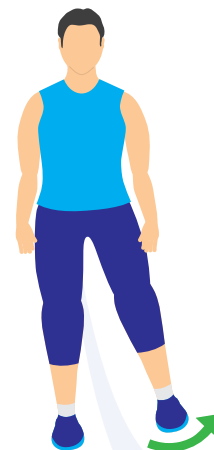
## STRENGTH AND BALANCE EXERCISES

All of these exercises should be performed holding on to a stable support with feet hip width apart and pointing forwards. Stand up tall and look straight ahead, moving slowly with control within a comfortable range only.



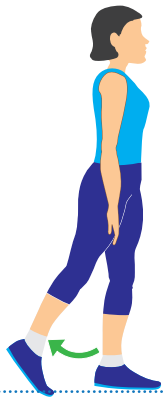
### 1. Ankle Strengthening

Rise up on to toes on both feet and hold for 5 seconds. Lower heels back to the ground to start position. Then transfer weight back onto the heels of both feet so that forefoot raises slightly off ground and hold for a few seconds. Lower feet to starting position. Repeat 20 times.



### 2. Hip Strengthening - side of hip

Raise one leg straight out to the side keeping both hips pointing forwards and hold for 5 seconds. Lower the leg back to the starting position and repeat on the other leg. Repeat 10 times for each leg.



### 3. Hip Strengthening - Back of hip

Raise one leg straight out behind keeping hips pointed forward and trunk upright and hold for 5 seconds. This will be a small movement. Do not let shoulders move forward. Lower the leg and repeat for other leg. Repeat 10 times for each leg.

### 4. Knee Bends

Squat down by bending the knees so that the knees move over the feet and the heels do not lift. Slowly straighten up into start position. Repeat 10 times.



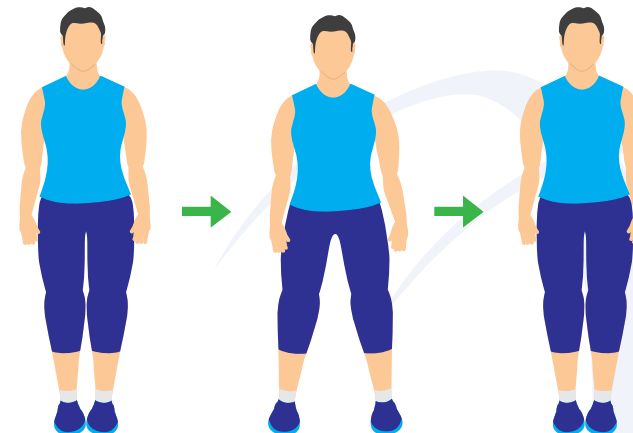
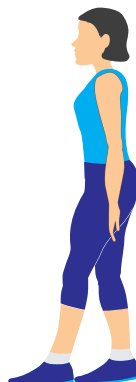
### 5. Single Leg Stand

Lift one foot and stand on one leg. Hold for 10 seconds. Then repeat for the other leg. Repeat 5 times for each leg.



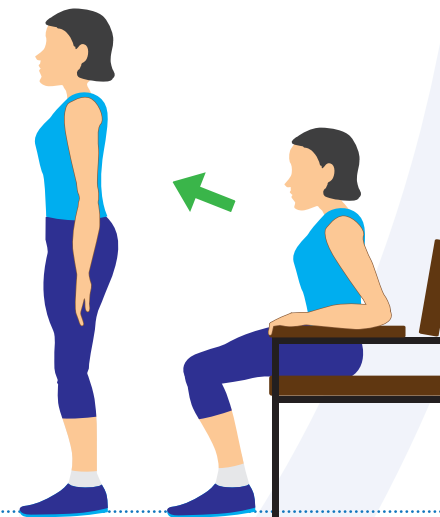
### 6. Heel Toe Standing

Place left foot directly in front of the right so they form a straight line. Hold for 10 seconds. Change position to place the left foot behind the right. Hold for 10 seconds. Repeat 10 times.



### 7. Sideways Walking

Take a wide step to the right. Repeat 2 or 3 times if you have enough room. Then take a wide step to the left. Repeat 2 or 3 times. Move 5 times in each direction.



### 8. Sit to Stand

Sit on a chair which is not too low. Place your feet behind your knees. Lean forwards over your knees and push up with both hands to stand up. Repeat 10 times.

## COOL DOWN

Cool down exercises should be performed before finishing your exercise programme. This allows your heart and muscles to adjust slowly from the state of exercise to the state of rest. Stretches will help the muscles to relax and make them less likely to feel stiff following rest. Repeat the warm up exercises and stretches at the start of this booklet, this time slowing them down as you perform them.

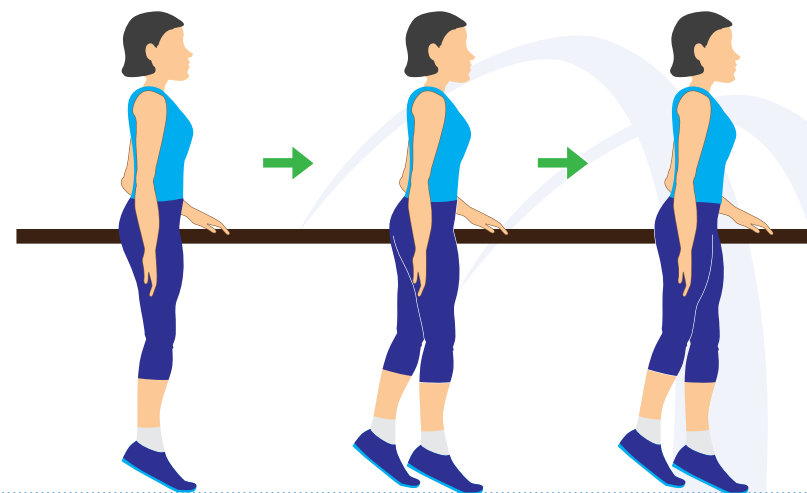
## ADVANCED EXERCISES

To progress these exercises the level of difficulty needs to be increased. This can simply be achieved by using just 1 hand for support and then trying with no hand support when it is safe to do so. If in doubt about your safety to progress consult with your Physiotherapist or Instructor.

The following exercises would be beneficial to add once your strength and balance has improved or is at a level to perform these safely.

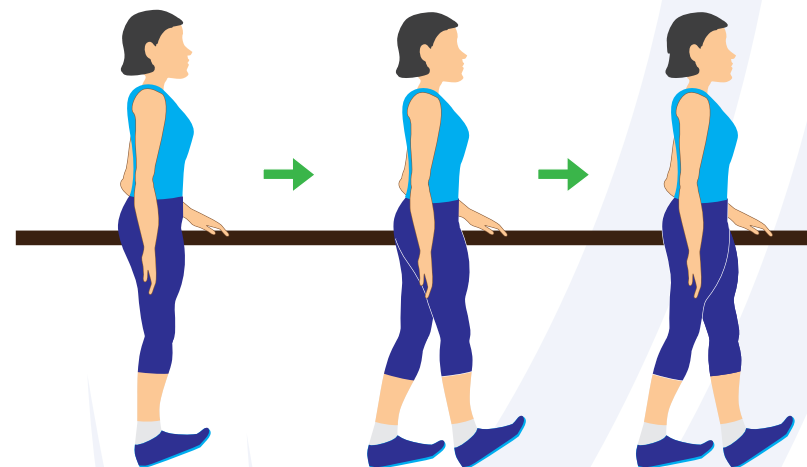
Each exercise can be continued for 2-3 minutes but stop before getting too tired.

Stand up tall beside the support. Hold on and look ahead.



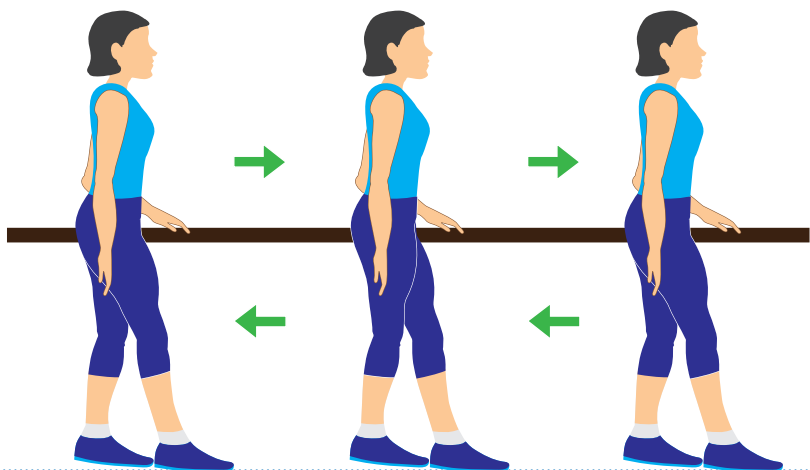
### 9. Toe Walking

Walk forward on toes as far as possible. Lower heels to the ground and turn around and repeat.



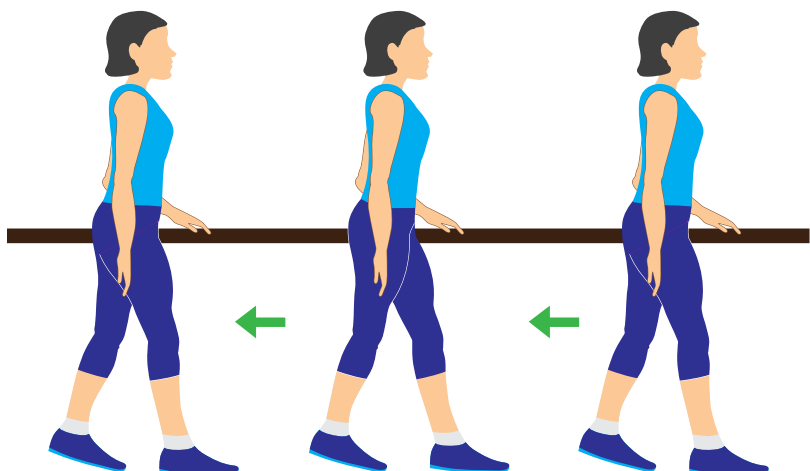
### 10. Heel Walking

Come back onto your heels, raising your toes off the floor. Walk forwards as far as possible. Lower your feet to the ground and turn around and repeat.



### 11. Heel-Toe Walking

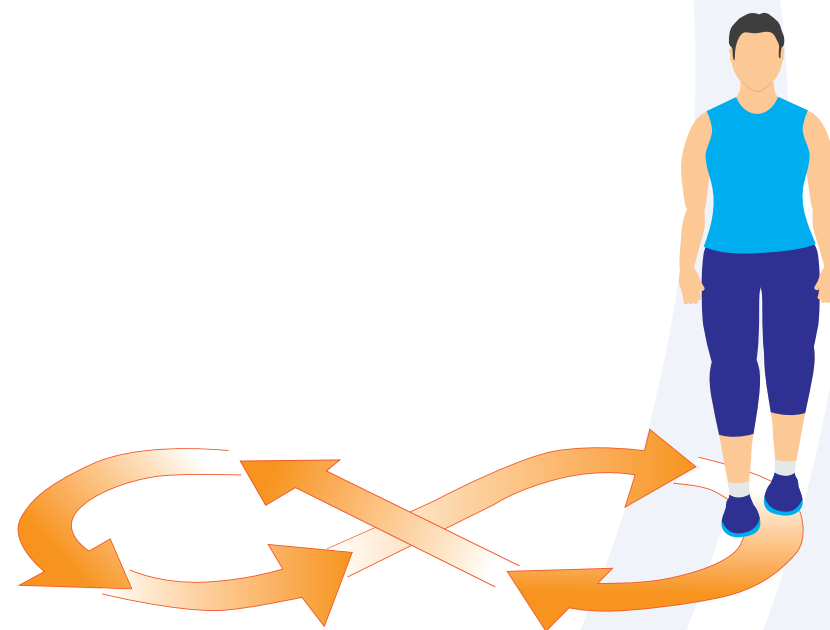
Place one foot directly in front of the other foot. Bring the back foot forward and place directly in front of other foot and repeat going as far forwards as possible. Then place the front foot behind the other and repeat moving backwards as far as possible.



### 12. Backwards Walking

Walk backwards as far as possible. Turn around and hold on with other hand and repeat. Take as long a step as possible without dropping your posture.

Once you can perform all of these exercises safely without the support of your hands you are ready to walk in a **figure of 8 movement** in a space in the centre of a room or hallway. Walk at your regular pace turning first in a clockwise direction. Once you are back at your starting position turn in an anti-clockwise direction and repeat ensuring you do not get dizzy.



# EXCERSISE CHECKLIST

When you can perform the exercises listed without the support of your hands you are ready to walk in a figure of 8 movement on page 13.

## WARM UP EXERCISES

PAGES 04 - 05

1. Marching Arms	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Marching Legs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Side Claps	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Toe Taps	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Heel Taps	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## STRETCHES

PAGE 06

1. Thigh Stretch	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Calf Stretch	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Chest Stretch	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## STRENGTH AND BALANCE EXERCISES

PAGES 07 - 12

1. Ankle Strengthening	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Hip Strengthening - Side of hip	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Hip Strengthening - Back of hip	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Knee Bends	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Single Leg Stand	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Heel Toe Standing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Sideways Walking	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Sit to Stand	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Toe Walking	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Heel Walking	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Heel-Toe Walking	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Backwards Walking	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



