

# The Illinois Agility Test

The Illinois Agility Test measures agility

**R**

In your own words, and using diagrams where appropriate, describe the procedure for carrying out a valid and reliable Illinois Agility Test. Remember to include a list of the equipment you need to carry out the test and the units of measurement used to record the quantitative data collected.

**Objective:** to test how quickly a person can change the position of their body while maintaining control

**Equipment required:**  
 - 8 cones/markers  
 - measuring tape  
 - stopwatch  
 - assistant

**Method/ procedure:**

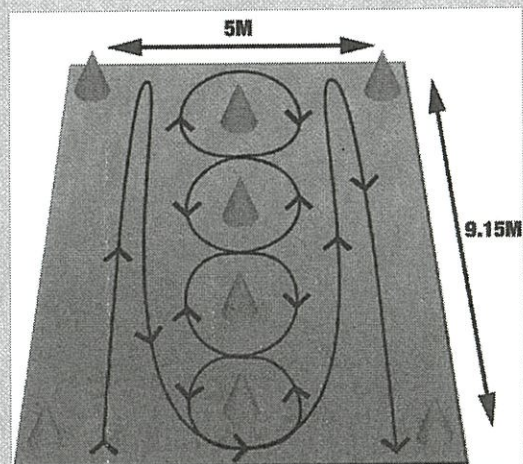
Lie down on your front with your head towards the starting line and your hands by your shoulders.

When your assistant says 'GO' and starts the stopwatch, get up as quickly as possible and run around the course in the direction shown.

Your assistant will stop the stopwatch as soon as you cross the finish line.

Record the number of seconds it took you to complete the course.

**Diagram:**



**Group Results:**

Max - 16.2	Matty - 16.4
Bruno - 18.3	Charlotte - 19.7
Molly - 17.8	Logan - 14.4
Sarah - 20.3	Paula - 23.0
Amy - 26.1	<del>Peppermint</del>

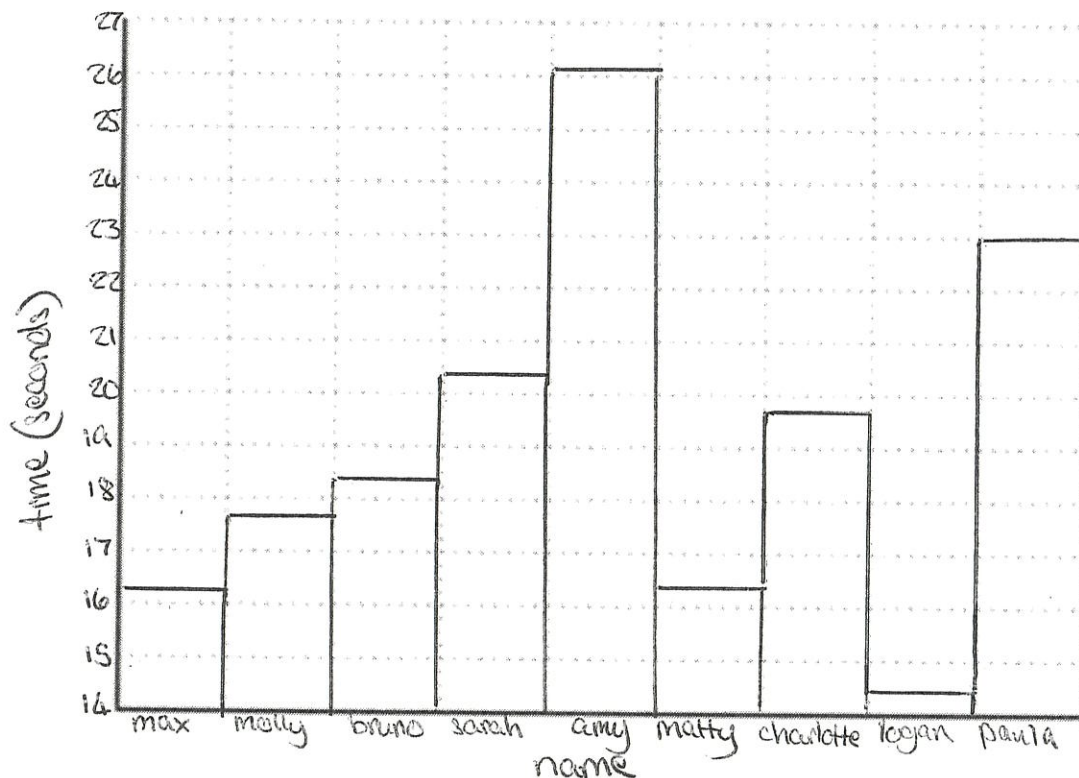
**Normative Data:**

		Above average	Average	Below average	Poor
Male	<15.2 sec	16.1-15.2	18.1-16.2	18.3-18.2	>18.3 sec
Female	<17.0 sec	17.9-17.0	21.7-18.0	23.0-21.8	>23.0 sec

# The Illinois Agility Test Analysis & Evaluation

Using the results you have collated from the fitness test you have carried out, analyse and evaluate the results of your group.

- ✓ You need to include a simple bar graph to represent your results for each subject.
- ✓ Comment on the results of each individual in relation to the normative data provided on your worksheet.
- ✓ Evaluate the performance of each individual and explain how the results may affect their performance in sport.
- ✓ You must evaluate the test you have carried by commenting on its strengths and limitations of the method.



Max scored 16.2 which is average. Molly scored 17.8 which is above average. Bruno scored 18.3 which is below average. Sarah scored 20.3 which is average. Amy scored 26.1 which is poor. Matty scored 16.4 which is average. Charlotte scored 19.7 which is average. Logan scored 14.4 which is excellent. Paula scored 23.0 which is poor.

# The Stork Balance Test

The Stork Balance Test measures balance

**R**

In your own words, and using diagrams where appropriate, describe the procedure for carrying out a valid and reliable Stork Balance Test. Remember to include a list of the equipment you need to carry out the test and the units of measurement used to record the quantitative data collected.

Objective: to test how long you can balance for on one leg

Equipment required:

- stopwatch
- assistant

Method/ procedure:

Start by standing on both feet with your hands on your hips.

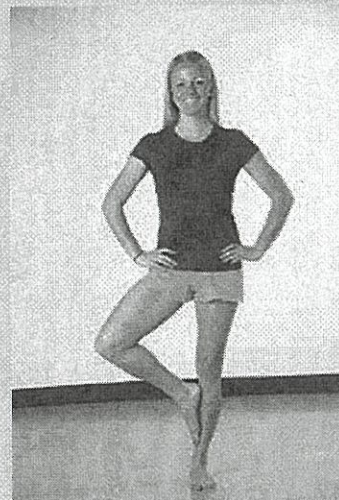
Lift one leg and place the toes of your raised foot against the knee of your standing leg.

Raise the heel of your standing leg so that you are standing on your tiptoes.

Balance for as long as possible without letting your heel touch the ground or other foot move away from your knee.

Your assistant will record the time in seconds that you can maintain the balance.

Diagram:



Group Results:

Erin - 7      Lucie - 8.85  
 Millie - 4      Sophia - 10.92  
 Annie - 15      Christina - 10.43  
 Eve - 13      Jess - 23  
                     Lucie M - 65

Normative Data:

		Above average	Average	Below average	Poor
Male	>50 sec	41-50 sec	31-40 sec	20-30 sec	<20 sec
Female	>30 sec	23-30 sec	16-22 sec	10-15 sec	<10 sec

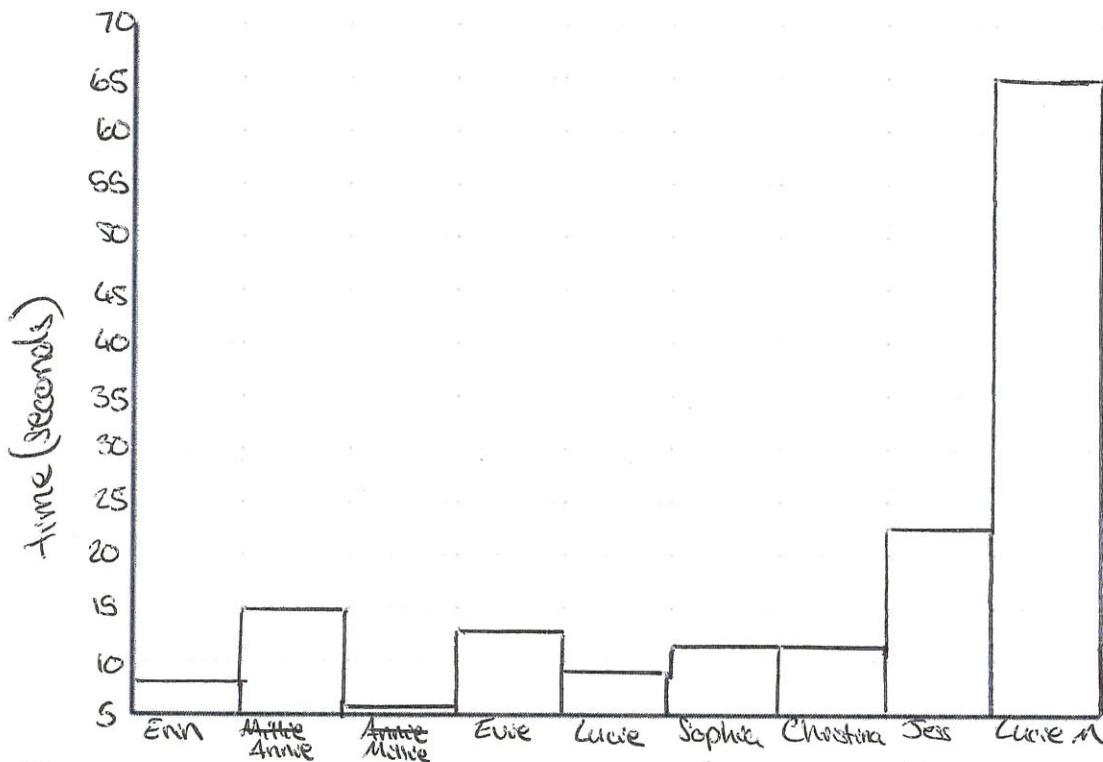
### 3.3

# The Stork Balance Test Analysis & Evaluation

E

Using the results you have collated from the fitness test you have carried out, analyse and evaluate the results of your group.

- ✓ You need to include a simple bar graph to represent your results for each subject.
- ✓ Comment on the results of each individual in relation to the normative data provided on your worksheet.
- ✓ Evaluate the performance of each individual and explain how the results may affect their performance in sport.
- ✓ You must evaluate the test you have carried by commenting on its strengths and limitations of the method.



Enn's score was 7 which is poor. As a netballer, you would need balance when landing after catching or intercepting the ball. My score was 15 which is below average. When playing football you need balance to some extent when dribbling or taking a shot. Milne's score was 6 which is poor. Evie's score was 13 which is below average. This test wasn't sport specific since you would never be in that position during a game.

# The Multi Stage Fitness Test

The Multi Stage Fitness Test measures maximal oxygen uptake cardiovascular endurance

**R**

In your own words, and using diagrams where appropriate, describe the procedure for carrying out a valid and reliable Multi Stage Fitness Test. Remember to include a list of the equipment you need to carry out the test and the units of measurement used to record the quantitative data collected.

**Objective:** to test cardiovascular endurance by seeing how many levels the athlete can successfully run for.

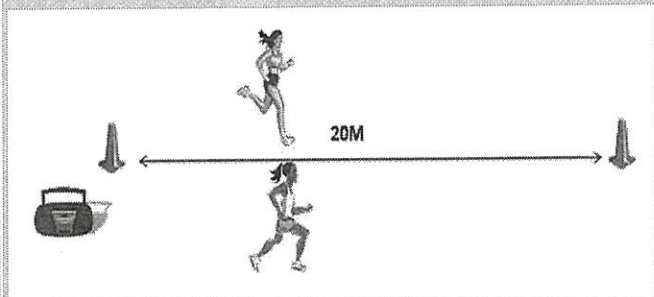
**Equipment required:**

- flat surface
- tape measure
- marking cones
- multi stage fitness test audiotape
- assistant

**Method/procedure:**

the assistant measures out a 20 metre section and marks it with cones.  
 the assistant starts the CD and the athlete commences the test.  
 if the athlete arrives at the end of a shuttle before the beep, they must wait for the beep then resume running.  
 if the athlete fails to reach the end before the beep, they are allowed 2-3 further shuttles before being withdrawn  
 the assistant records the level completed.

**Diagram:**



**Group Results:**

Eren 10.2  
 Millie 10.2  
 Annie 8.3  
 Evie 8.10  
 Bella 8.3

**Normative Data:**

		Above average	Average	Below average	Poor
Male	Level 12	Level 11	Level 8	Level 7	< Level 6
Female	Level 10	Level 9	Level 6	Level 5	< Level 4

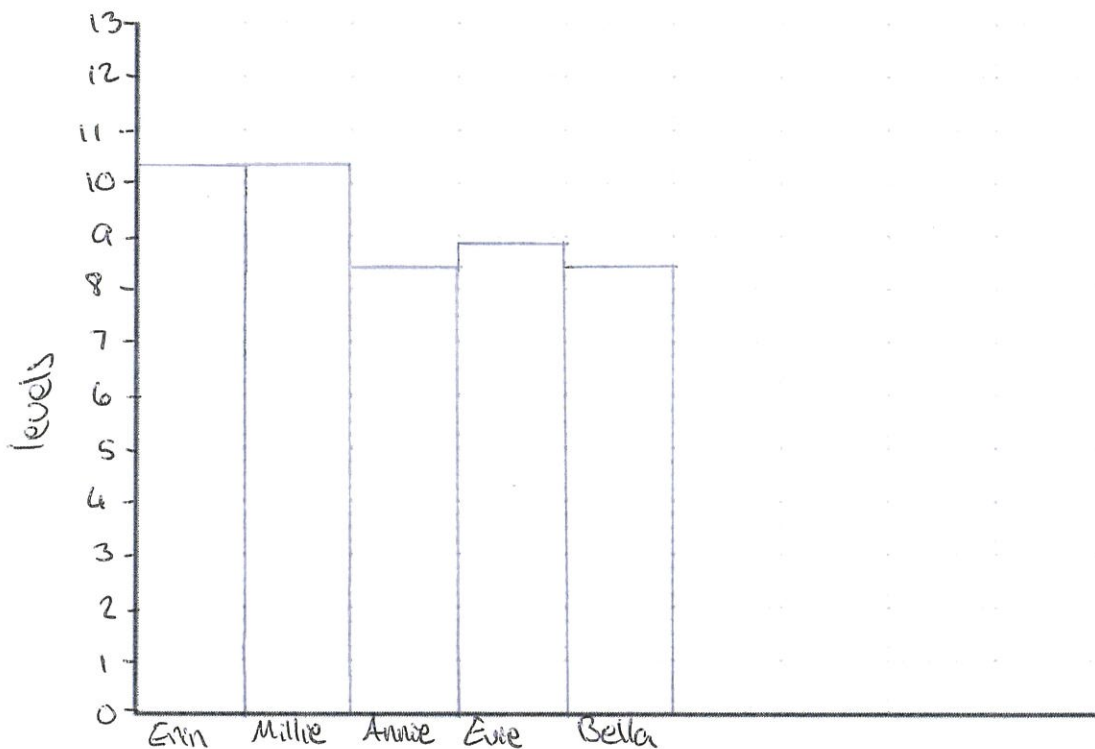
## 3.3

# The Multi-Stage Fitness Test

## Analysis & Evaluation

Using the results you have collated from the fitness test you have carried out, analyse and evaluate the results of your group.

- ✓ You need to include a simple bar graph to represent your results for each subject.
- ✓ Comment on the results of each individual in relation to the normative data provided on your worksheet.
- ✓ Evaluate the performance of each individual and explain how the results may affect their performance in sport.
- ✓ You must evaluate the test you have carried by commenting on its strengths and limitations of the method.



Erin scored 10.2 which is excellent and this is very useful to her, being a netballer since you need high levels of cardiovascular endurance as it is a fast-paced, constantly moving sport. Millie also scored 10.2 which is excellent and this is useful to her for the same reasons. I scored 8.3 which is average so this is a skill I need to develop and train to improve since football is a sport which needs high levels of cardiovascular endurance. Eve scored 8.9 which is also average so she may want to work + improve this as well since she also plays football. Bella scored 8.3 which is average but these scores aren't too worrying. However a limitation to this test is that you would never be in a situation like this in a sport.

# The Wall Toss Test

The Wall Toss Test measures hand-eye coordination

**R**

In your own words, and using diagrams where appropriate, describe the procedure for carrying out a valid and reliable Wall Toss Test. Remember to include a list of the equipment you need to carry out the test and the units of measurement used to record the quantitative data collected.

Objective: avoid dropping the ball to measure hand-eye coordination

Equipment required:

- tennis ball
- flat wall
- marking tape
- stopwatch

Method/ procedure:

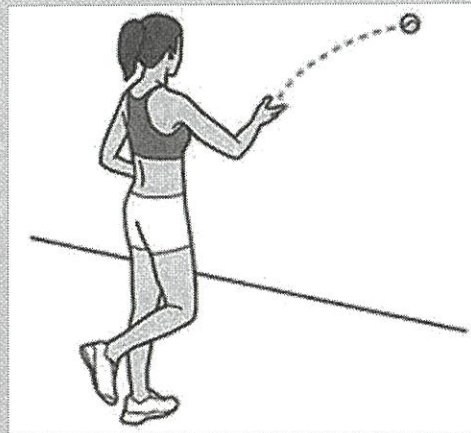
Measure two metres from a wall and mark a line. Stand behind the line and face the wall.

Throw the ball against the wall with your left hand, using an underarm action, and catch it with your right hand.

Throw the ball against the wall with your right hand, again using an underarm action, and catch it with your left.

Continue this process for 30 seconds, counting the number of successful catches.

Diagram:



Group Results:

Erin - 26  
 Millie - 17  
 Annie - 25  
 Eire - 17

Normative Data:

	Excellent	Above average	Average	Below average	Poor
Score (in 30 sec)	> 35	30-35	25-29	20-24	< 20

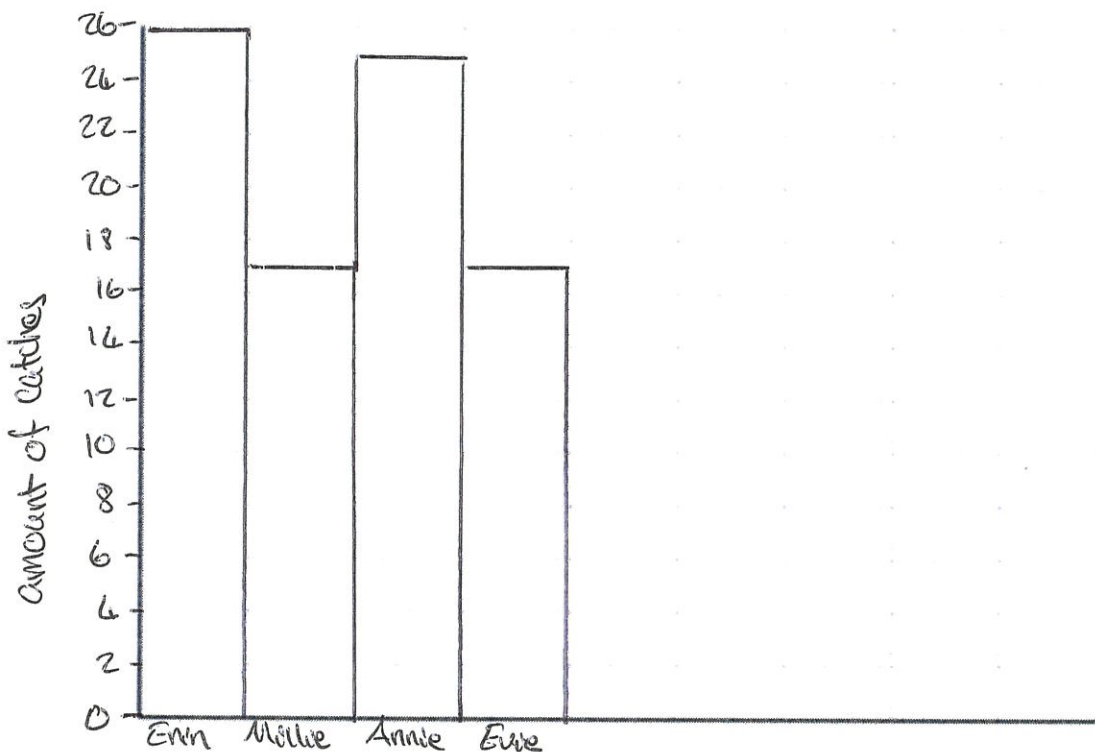
### 3.3

# The Wall Toss Test Analysis & Evaluation

E

Using the results you have collated from the fitness test you have carried out, analyse and evaluate the results of your group.

- ✓ You need to include a simple bar graph to represent your results for each subject.
- ✓ Comment on the results of each individual in relation to the normative data provided on your worksheet.
- ✓ Evaluate the performance of each individual and explain how the results may affect their performance in sport.
- ✓ You must evaluate the test you have carried by commenting on its strengths and limitations of the method.



Emm's score was 26 which is average. In netball you need hand-eye coordination to successfully catch the ball during a game. Millie's score was 17 which is poor. My score was 25 which is average and Eve's score was 17 which is poor. These scores are concerning since coordination is important in ball sports, such as passing in football or throwing in netball. This test could be inaccurate since the ball is much smaller than a netball or handball so it will be harder to catch.

# The Sit and Reach Test

The Sit and Reach Test measures flexibility flexibility

**R**

In your own words, and using diagrams where appropriate, describe the procedure for carrying out a valid and reliable Sit and Reach Test. Remember to include a list of the equipment you need to carry out the test and the units of measurement used to record the quantitative data collected.

Objective: to test the flexibility of the muscles in the lower back and the hamstring group

Equipment required:

- a box
- measuring tape
- sit and reach table

Method/procedure:

Put the soles of your feet, shoulder width apart, against the box/table.

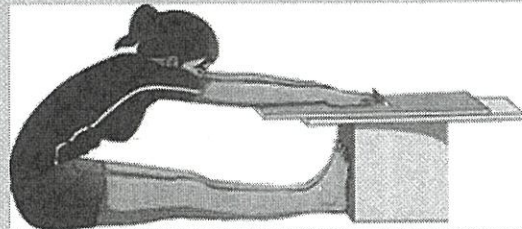
Make sure your knees are straight, as this is what determines hamstring flexibility. If your knees bend during the test, the results will be inaccurate.

With your hands stretched towards your feet, lean forwards and reach as far as possible with your fingertips. If possible, reach beyond the end of your toes and over the top of the box. You must make sure, however, that there are no jerky movements while doing this and that you are able to hold the reach for at least two seconds.

You get three chances to stretch forwards and then the fourth stretch is measured.

The distance that your fingers touch on the measuring tape/sit and reach table will be your score, showing the distance you were from 0 cm.

Diagram:



Group Results:

Erin 42cm  
 Millie 42cm  
 Annie 35cm  
 Eve 41cm

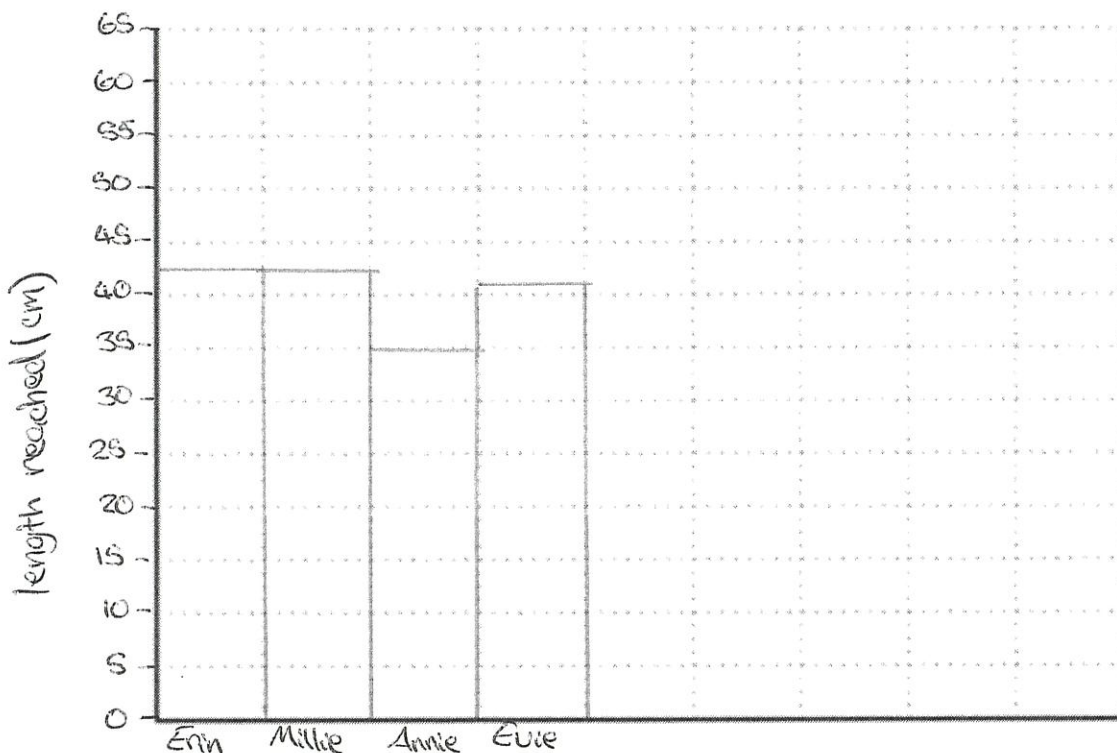
Normative Data:

		Above average	Average	Below average	Poor
Male	> 14cm	14 – 11cm	10.9 – 7cm	6.9 – 4cm	< 4cm
Female	> 15cm	15 – 12cm	11.9 – 7cm	6.9 – 4cm	< 4cm

# The Sit and Reach Test Analysis & Evaluation

Using the results you have collated from the fitness test you have carried out, analyse and evaluate the results of your group.

- ✓ You need to include a simple bar graph to represent your results for each subject.
- ✓ Comment on the results of each individual in relation to the normative data provided on your worksheet.
- ✓ Evaluate the performance of each individual and explain how the results may affect their performance in sport.
- ✓ You must evaluate the test you have carried by commenting on its strengths and limitations of the method.



Erin scored 42cm which is excellent, and is useful as a netballer since you need some form of flexibility when going into different positions to catch the ball under pressure and in a fast paced game. Millie also scored 42cm which is excellent and is useful for the same reasons. I scored 35cm which is also excellent and is useful when stretching to reach for the ball. Eve scored 41cm which is again excellent. However, this test isn't extremely useful since it doesn't replicate a real game situation.

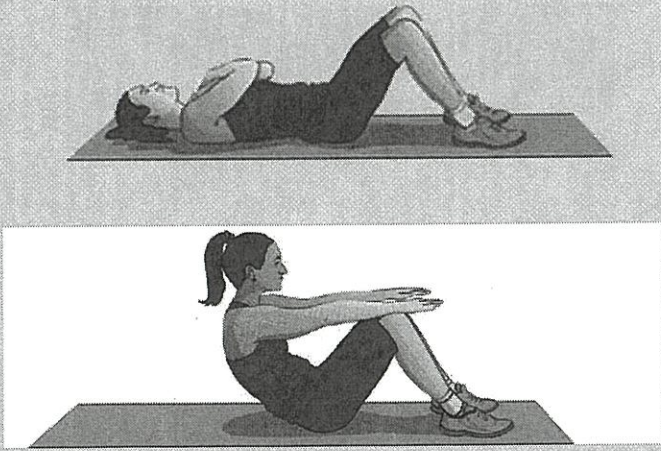
# The Sit-up Bleep Test

The Sit-Up Bleep Test measures .....

**R**

In your own words, and using diagrams where appropriate, describe the procedure for carrying out a valid and reliable Sit-Up Bleep Test. Remember to include a list of the equipment you need to carry out the test and the units of measurement used to record the quantitative data collected.

Objective:	Equipment required:
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<p><b>Method/ procedure:</b></p> <p>Lie down on the mat with your knees bent and your feet flat on the ground.</p> <p>Your assistant will start the bleep test recording when you are ready.</p> <p>Perform a series of sit ups in time to the beeps. The time between the beeps will get shorter.</p> <p>The test is over when you can no longer keep up with the beeps or use the correct technique. Record the total number of sit-ups and compare with national averages.</p>	<p><b>Diagram:</b></p> 
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**Group Results:**

**Normative Data:**

Stage	1	2	3	4	5	6	7	8
<b>Total sit-ups</b>	20	42	64	89	116	146	180	217
<b>Male</b>	Poor	Poor	Fair	Fair	Good	Good	Excellent	Excellent
<b>Female</b>	Poor	Fair	Fair	Good	Good	Very Good	Excellent	Excellent



# The Vertical Jump Test

The Vertical Jump Test measures *power*

**R**

In your own words, and using diagrams where appropriate, describe the procedure for carrying out a valid and reliable Vertical Jump Test. Remember to include a list of the equipment you need to carry out the test and the units of measurement used to record the quantitative data collected.

Objective: to measure power and explosive strength by measuring the height of a vertical jump

Equipment required:

- wall
- measuring tape
- chalk
- assistant

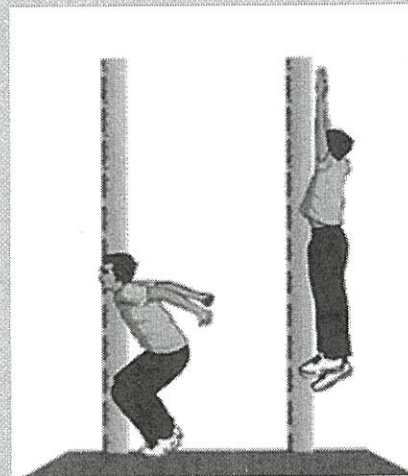
Method/ procedure:

Stand side-on to a wall and reach up with the hand closest to the wall. Keeping your feet flat on the ground, your assistant should mark or measure the point on the wall where the top of the fingertip of your longest finger touches. This is your standing reach.

Put a little chalk on your fingertips. Stand away from the wall and jump vertically as high as possible using both your arms and your legs to help you project your body upwards. Touch the wall at the highest point of the jump and have this marked or recorded.

The difference in distance between the standing reach height and the jump height is your score.

Diagram:



Group Results:

Erin 47  
 Millie 33  
 Annie 38  
 Eve 39  
 Bella 40

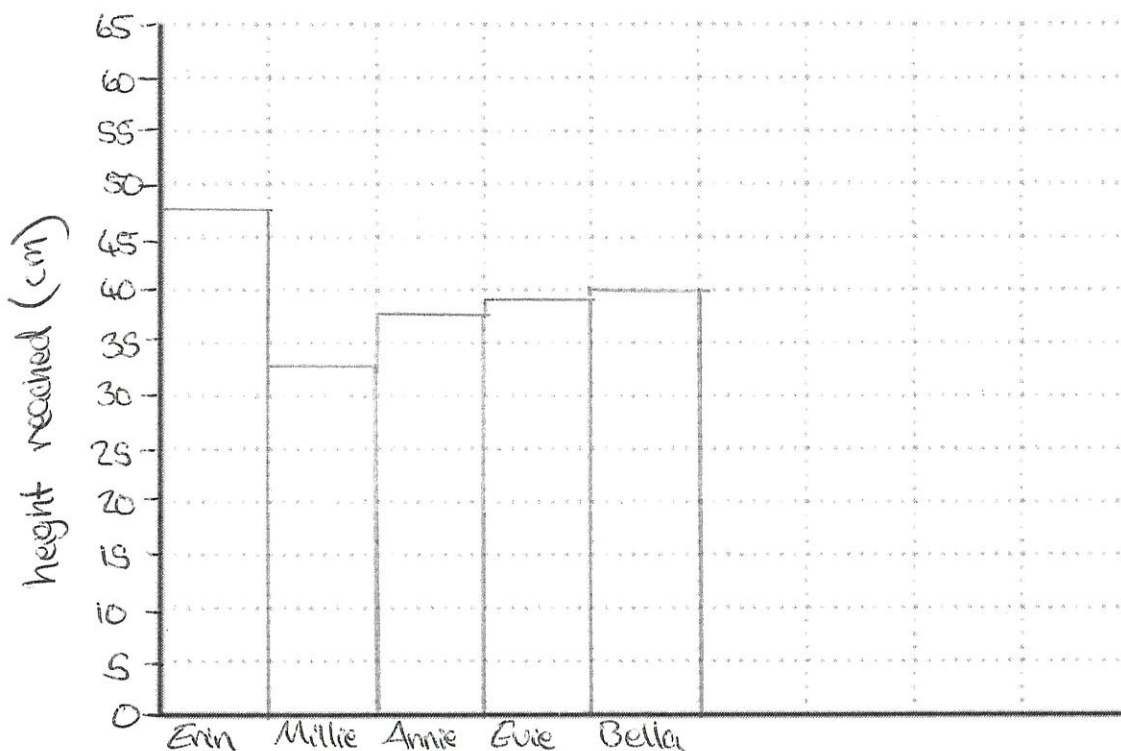
Normative Data:

	Excellent	Above average	Average	Below average	Poor
Male	> 65cm	50 - 65cm	40 - 49cm	30 - 39cm	< 30cm
Female	> 58cm	47 - 58cm	36 - 46cm	26 - 35cm	< 26cm

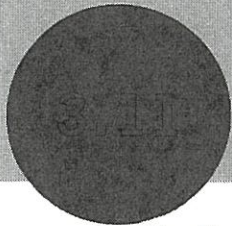
# The Vertical Jump Test Analysis & Evaluation

Using the results you have collated from the fitness test you have carried out, analyse and evaluate the results of your group.

- ✓ You need to include a simple bar graph to represent your results for each subject.
- ✓ Comment on the results of each individual in relation to the normative data provided on your worksheet.
- ✓ Evaluate the performance of each individual and explain how the results may affect their performance in sport.
- ✓ You must evaluate the test you have carried by commenting on its strengths and limitations of the method.



Erin scored 47 which is above average, this is good as a netballer you would have to jump high vertically when trying to block, intercept a pass or have a shot. Millie scored 33 which is below average, this is worrying and is something she should work on as a netballer, for the same reasons as Erin. I scored 38 which is average, and this could be an area to work on but isn't too worrying since in football you don't often need this skill. Eve scored 39 and Bella scored 40 which are both on the average category. This isn't sport specific however, since this is a closed skill but in a game you would have oppositions.



# The Ruler Drop Test

The Ruler Drop Test measures reaction time

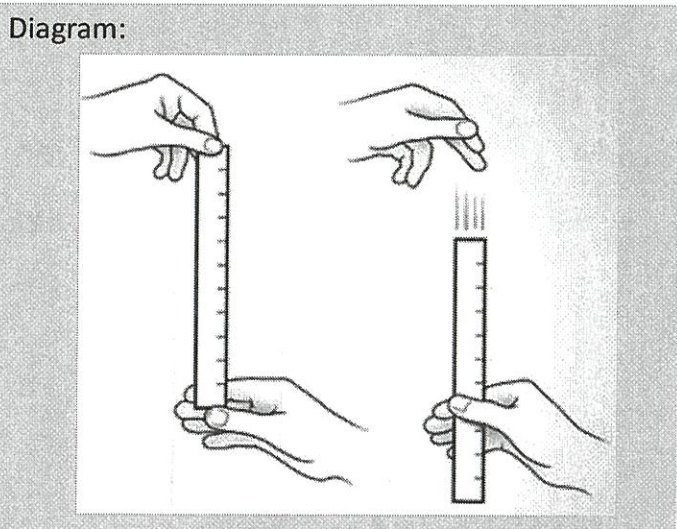
**R**

In your own words, and using diagrams where appropriate, describe the procedure for carrying out a valid and reliable Ruler Drop Test. Remember to include a list of the equipment you need to carry out the test and the units of measurement used to record the quantitative data collected.

**Objective:** to measure reaction time by measuring ability to catch a falling ruler

**Equipment required:**  
- ruler  
- assistant

**Method/ procedure:**  
  
Your assistant holds the ruler between the outstretched index finger and thumb of your dominant hand.  
  
The top of your thumb should be level with the 0 centimetre line of the ruler.  
  
Your assistant drops the ruler and you catch it as soon as possible after it has been dropped.  
  
Record the distance in from the 0 cm to the top of your thumb.  
  
Complete 3 times and take the best result.



**Group Results:**  
Evan 10  
Mille 10  
Annae 11  
Eve 8.5

**Normative Data:**

	Excellent	Above average	Average	Below average	Poor
	> 7.5cm	7.5 – 15.9cm	15.9–20.4 cm	20.4 – 28cm	< 28cm

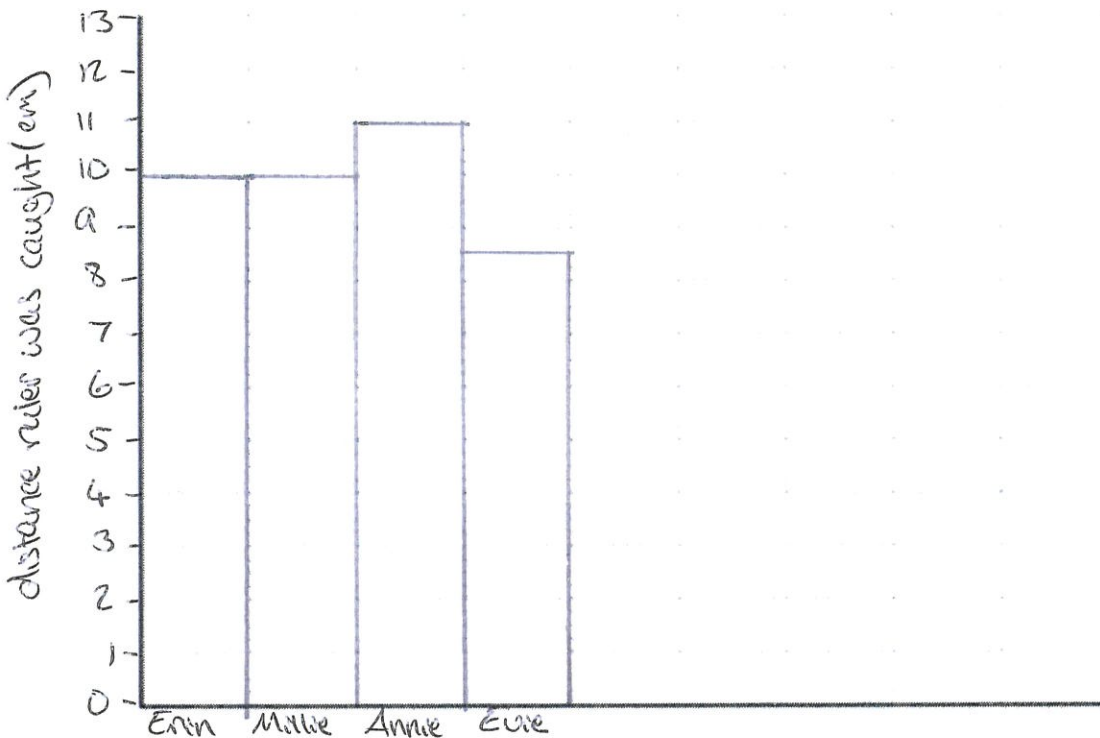
## 3.3

# The Ruler Drop Test

## Analysis & Evaluation

Using the results you have collated from the fitness test you have carried out, analyse and evaluate the results of your group.

- ✓ You need to include a simple bar graph to represent your results for each subject.
- ✓ Comment on the results of each individual in relation to the normative data provided on your worksheet.
- ✓ Evaluate the performance of each individual and explain how the results may affect their performance in sport.
- ✓ You must evaluate the test you have carried by commenting on its strengths and limitations of the method.



Erin scored 10cm which is above average, this is good for her sport since netball requires a fast reaction time, with it being a very fast paced game and she needs to be ready to receive a pass and react to it being thrown. Millie scored 10cm as well and is also a netballer so this skill is useful to her for the same reasons. I scored 11cm which is also above average but may not be as useful in football especially since this test only showed the reaction time of your hands, not feet or legs. Evie scored 8.5cm which is also above average. However, this test is not sport specific so isn't extremely useful in knowing if reaction time in your sport needs practice or improvement.

# The 30 Metre Sprint Test

The 30 Metre Sprint Test measures speed

**R**

In your own words, and using diagrams where appropriate, describe the procedure for carrying out a valid and reliable 30 Metre Sprint Test. Remember to include a list of the equipment you need to carry out the test and the units of measurement used to record the quantitative data collected.

Objective: to determine acceleration and speed

Equipment required:

- measuring tape / marked track
- stopwatch
- cone markers
- assistant
- flat surface

Method/ procedure:

Start from a stationary position, with one foot in front of the other and with the front foot on or behind the starting line. Hold the position for at least two seconds before starting, and do not rock backwards and forwards.

Run, as fast as you can, to the finish line. Your assistant should time you. The timing starts from your first movement and finishes when your chest crosses the finish line.

You have two attempts and the best time is recorded in seconds, to one decimal place.

Diagram:



Group Results:

Milie 2.81  
Annie 3.05  
Evie 3.08  
Bella 3.15

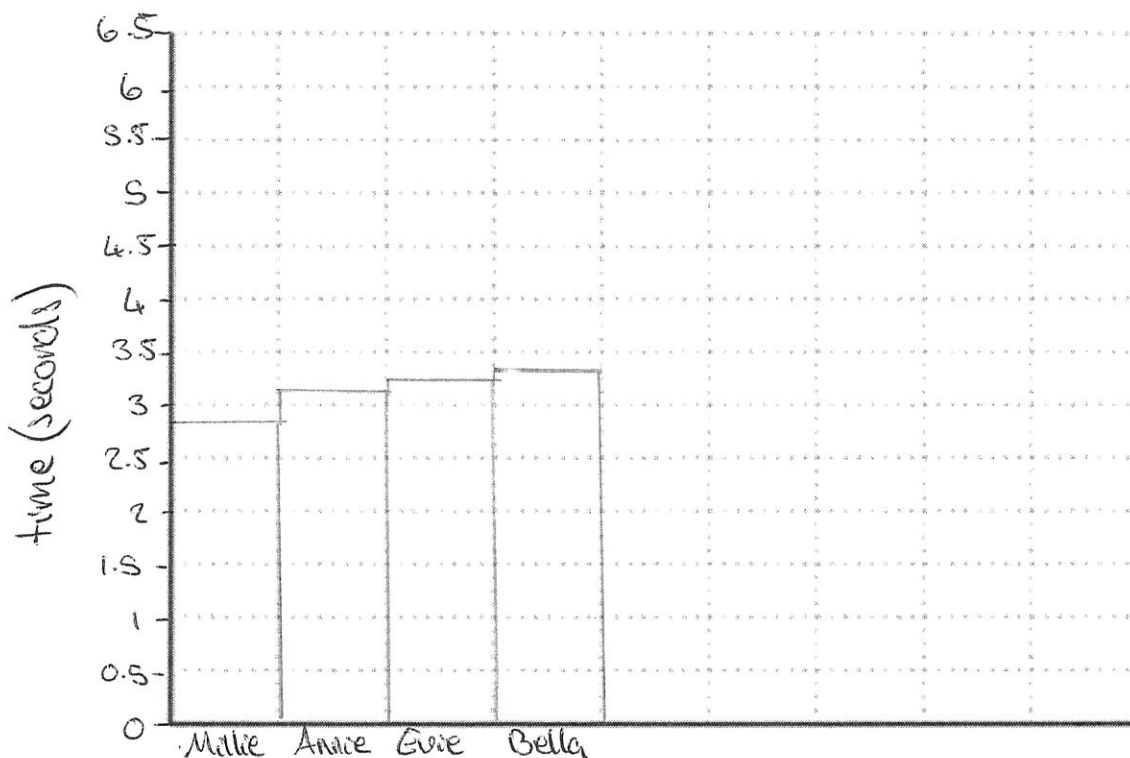
Normative Data:

		Above average	Average	Below average	Poor
Male	< 4 sec	4.2 – 4 sec	4.4 – 4.3 sec	4.6 – 4.5 sec	> 4.6 sec
Female	< 4.5 sec	4.6 – 4.5 sec	4.8 – 4.7 sec	5 – 4.9 sec	> 5 sec

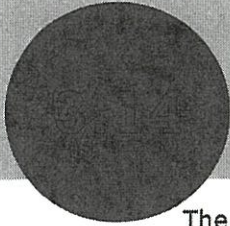
# The 30 Metre Sprint Test Analysis & Evaluation

Using the results you have collated from the fitness test you have carried out, analyse and evaluate the results of your group.

- ✓ You need to include a simple bar graph to represent your results for each subject.
- ✓ Comment on the results of each individual in relation to the normative data provided on your worksheet.
- ✓ Evaluate the performance of each individual and explain how the results may affect their performance in sport.
- ✓ You must evaluate the test you have carried by commenting on its strengths and limitations of the method.



Mike scored 2.81 which is excellent and this is useful to her since in netball she may have to sprint to a certain area of the court to receive a pass or make an interception. I scored 3.05 which is excellent and this is useful since I might have to make a fast run in football or sprint to get back to defend. Eve scored 3.08 and Bella scored 3.15 which are both excellent and are useful to them for the same reasons listed. A strength of this test is that it is quite accurate to an in-game situation such as running 30m to make a tackle in rugby.



# The Handgrip Dynamometer Test

The Handgrip Dynamometer Test measures strength

**R**

In your own words, and using diagrams where appropriate, describe the procedure for carrying out a valid and reliable Handgrip Dynamometer Test. Remember to include a list of the equipment you need to carry out the test and the units of measurement used to record the quantitative data collected.

Objective: to measure grip or forearm muscle strength

Equipment required:  
- grip dynamometer

### Method/ procedure:

Use a grip dynamometer to measure grip strength.

Record the maximum reading from three attempts using your dominant hand.

Allow one-minute recovery time between each attempt.

Grip strength is usually measured in kilograms (kg).

### Diagram:



### Group Results:

Erin 25  
Millie 25  
Annie 26  
Eve 32  
Bella 18.5

### Normative Data:

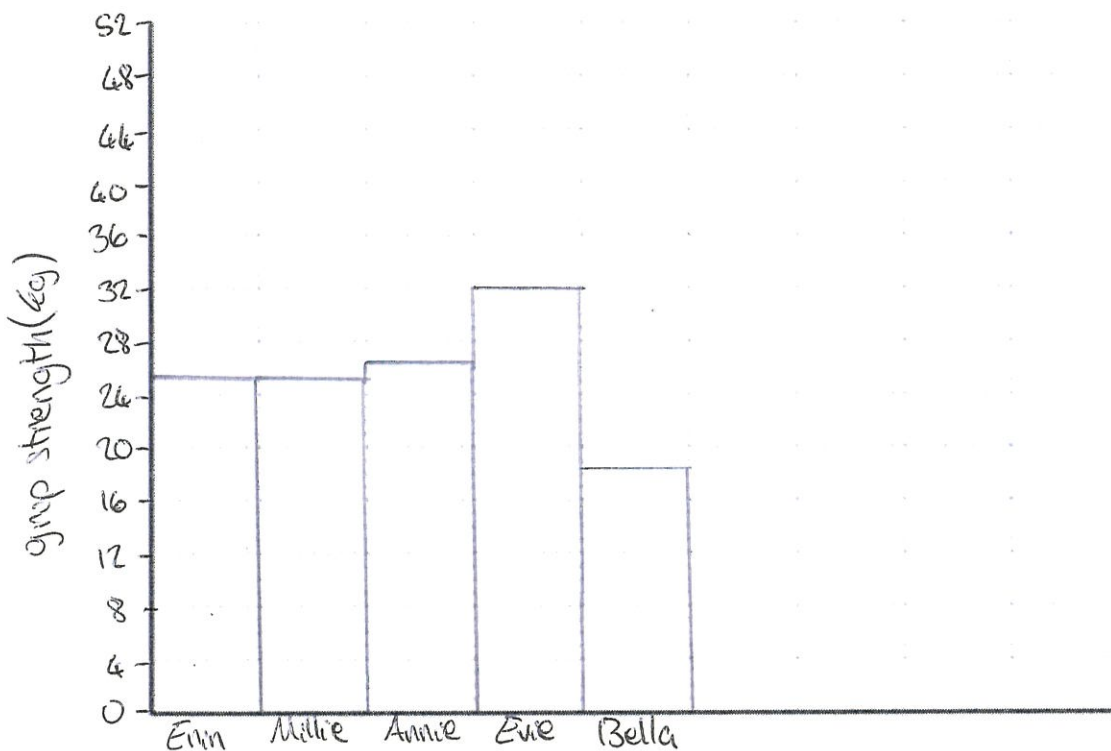
	Excellent	Above average	Average	Below average	Poor
Male	> 56kg	51 – 56kg	45 – 50kg	39 – 44kg	< 39kg
Female	> 36kg	31 – 36kg	25 – 30kg	19 – 24kg	< 19kg

### 3.3

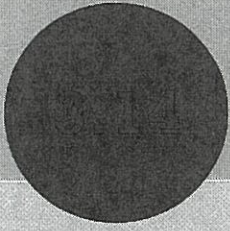
# The Handgrip Dynamometer Test Analysis & Evaluation

Using the results you have collated from the fitness test you have carried out, analyse and evaluate the results of your group.

- ✓ You need to include a simple bar graph to represent your results for each subject.
- ✓ Comment on the results of each individual in relation to the normative data provided on your worksheet.
- ✓ Evaluate the performance of each individual and explain how the results may affect their performance in sport.
- ✓ You must evaluate the test you have carried by commenting on its strengths and limitations of the method.



Erin scored 25 which is average however she doesn't really need this skill in any of her sports. Millie also scored 25 but again this won't be a very useful skill to her. I scored 26 which is average. Eve scored 32 which is above average and Bella scored 18.5 which is poor so this could be an area of improvement for Bella, despite this test not being vital to any of our sports such as netball and football. This test is not sport specific since it doesn't replicate an in-game situation of any sport.



# Components of Fitness

## Fitness Testing

Q1. Julie is a 17-year-old footballer. She has just taken the Illinois Agility Test. She completes the course in 17.5 seconds. Using the table below, identify the correct rating for Julie.

(1 mark)

	Excellent	Above average	Average	Below average	Poor
Male	<15.2 sec	16.1-15.2	18.1-16.2	18.3-18.2	>18.3 sec
Female	<17.0 sec	17.9-17.0	21.7-18.0	23.0-21.8	>23.0 sec

A

Julie's rating above average

Q2. Suggest two benefits and two limitations of using fitness tests.

(4 marks)

A benefit is that you can identify strengths and weaknesses and it can help with motivation. A limitation is that they aren't always sport specific and they don't replicate competitive environments.

Q3. Would an Illinois Agility Test be appropriate for a netball player? Justify your answer.

(3 marks)

Yes it would be appropriate since in netball you need to change direction quickly while still maintaining control so you don't lose possession. An example is trying to lose a defender.