

Worksheet 5.1a: Literacy

See Session 5.1 for instructions and examples for this activity.

Write a poem or a rap about an athletics event.

Choose your event from: 100m sprint, 110m hurdles, Long jump, High Jump, 4 x 100m relay, Javelin, Pole vault, Marathon / long-distance running.

Then choose your athlete - you can use the case studies in Session 5.1 to help.

The event and athlete the poem or rap will be about is:

The event involves the following (for example, actions, equipment, locations):

Once you know your event, you can then begin to look at different words that are associated with that event. For example, some words associated with the 110m hurdles and emotions could be:

Fast, Stride, Pace, Finishing line, Hurdle , Jump, Win, Struggle, Fall, Elated, Victorious, Proud, Deflated.

How many other words about emotions can you come up with?

Perhaps you can draw an idea shower to get your thoughts on paper.

Worksheet 5.1b: Literacy

See Session 5.1 for instructions and examples for this activity.

Once you've completed Worksheet 5.1a, use this space to write your poem or rap

Worksheet 5.2a: Literacy

See Session 5.2 for instructions and examples for this activity.

To help you write your article, write some answers to the questions below.

Here are two famous athletes and their sports - can you think of any more?

- Mo Farah - Middle distance and long-distance runner
- Katarina Johnson-Thompson - Heptathlon

These are some famous athletics competitions - can you think of at least one more?

- London Marathon
- The Great North Run
- Commonwealth Games

What could happen during an athletics event?

Here are things that could happen:

- Athlete comes second and wins a silver medal
- Athlete gets injured and has to give up
- Athlete trips up and doesn't win

Can you think of two more?

Here's a list of words to do with athletics.

- Train
- Run
- Jump
- Throw
- Celebrate
- Race
- Fast
- Strong
- Happy
- Disappointed

Can you think of five more to add?

Worksheet 5.2b: Literacy

See Session 5.2 for instructions and examples for this activity.

Once you've completed Worksheet 5.2a, use this space to write your news story

Worksheet 5.3a: Numeracy

See Session 5.3 for instructions and examples for this activity.

Choosing a relay team - runner times

You are managing a 4 x 100m relay team.

You have to choose four runners from six possible athletes.

Below is a table of six runners with their three most recent 100m times.

Work out their average times.

Runner	Time on 15 January	Time on 15 February	Time on 15 March	Average time
Runner A	10.5 secs	10.6 secs	10.4 secs	10.5 secs
Runner B	10.0 secs	10.3 secs	10.3 secs	10.2 secs
Runner C	10.3 secs	11.2 secs	10.3 secs	10.6 secs
Runner D	10.6 secs	10.6 secs	10.4 secs	10.53 secs
Runner E	11.0 secs	10.6 secs	10.2 secs	10.6 secs
Runner F	10.4 secs	10.3 secs	10.5 secs	10.4 secs

By looking at the results, choose your relay team of the four runners with the four fastest average times.

My team will be made up of the following athletes:

1:

2:

3:

4:

Worksheet 5.3b: Numeracy

See Session 5.3 for instructions and examples for this activity.

Choosing a relay team - runner order

Now you have chosen your team, you must choose which order they run in.

Here is some additional information about the runners

Runner	Good starter?	Good bend runner?
Runner A	No	No
Runner B	No	Yes
Runner C	Yes	No
Runner D	Yes	No
Runner E	Yes	Yes
Runner F	No	Yes

One popular strategy for running a successful relay race is:

- The fastest runner goes last
- Of the remaining three runners, the best at starting goes first
- Of the remaining two runners, the best bend runner goes third as this is the top bend
- The remaining runner goes second as this is a straight run.

Use this strategy to select who should run when. Write your answers below.

The first runner will be:

The second runner will be:

The third runner will be:

The fourth runner will be:

Worksheet 5.4a: Numeracy

See Session 5.4 for instructions and examples for this activity.

Task 1: ordering high jump world records

Below are some world record high jumps, along with the technique used to achieve them. Put the jumps in order from highest to lowest by filling out the table below.

Male world record high jumps

Fosbury flop - 2.45m (245cm), Javier Sotomayor of Cuba, 1993

Scissor jump - 1.97m (197cm), Michael Sweeney of USA, 1895

Standing jump - 1.89m (189cm), Marshall Brooks of Great Britain, 1876

Straddle jump - 2.00m (200cm), George Horine of USA, 1912,

Technique	Jump height (highest to lowest)

Female world record high jumps

Fosbury flop - 2.09m (209cm), Stefka Kostadinova of Bulgaria, 1987

Scissor jump - 1.59m (159cm), Ethel Catherwood of Canada, 1928

Straddle jump - 2.00m (200cm), Rosemarie Ackermann of Germany, 1977

Technique	Jump height (highest to lowest)

Task 2: analysis

Look at the data above. What do you notice about the highest jumps for men and women and the corresponding techniques?

What other patterns do you notice?

Thinking back to your predictions at the beginning of the session, which technique do you think produces the best results?

Worksheet 5.4b: Numeracy

See Session 5.4 for instructions and examples for this activity.

Task 1: measuring out jumps

Measure out the two highest jumps (male and female) with a tape measure along the floor. This will show you just how high some professional athletes can jump! You could use chalk to measure out the jumps on the ground and see how many members of your family fit into your measurements.

TIP

Take your time to measure carefully and accurately. It's a good idea to measure once, write down the measurement and then measure again to check you got it right!

Task 2: comparing measurements

Once you have done this, measure your own height and then calculate the difference by subtracting your height from the high jump's height. This will show you how much higher than your own height some athletes can jump!

Highest female jump	My height	Difference

Highest male jump	My height	Difference

Task 3: measuring with non-standard units

Once you have done this, you can use non-standard forms of measurement such as a 1 litre bottle of milk, DVD case or even school tie to measure the height of two jumps. Use this table to fill out your findings. An example has been completed for you.

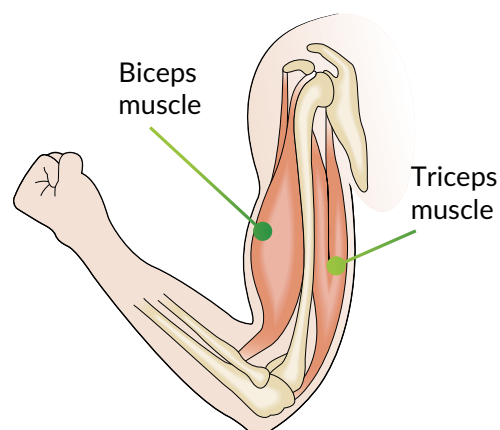
Jump technique	Actual height of jump	Unit of measurement	Number of units
Straddle jump	1.90m (190cm)	1 litre milk bottle	9.5 (9 1/2)

Worksheet 5.5: Science

See Session 5.5 for instructions and examples for this activity.

1. Finding out how muscles work

Work with a partner to find out how muscles achieve movement. In your pairs, examine your partner's upper arm. Look at what happens when they bend their arm. Pay particular attention to what the biceps and triceps muscles are doing.



What happens when your partner bends their arm?

Does anything happen when they relax?

Which muscle does your partner use to straighten their arm again?

Thinking of what you have just witnessed, do muscles work on their own or in pairs? Explain why.

2. Fast and slow twitch muscles

All muscles are made up of two types of fibre:

Slow twitch

Slow twitch muscle fibres contract slowly, but keep working for a long time. Slow twitch muscle fibres are good for endurance activities that require you to keep going for a while.

Fast twitch

Fast twitch muscle fibres contract very quickly, but get tired after a short time. These type of muscles are good for rapid or quick movements.

From the below list, see if you can guess which events require the use of fast or slow twitch muscles:

- | | | |
|------------------------------|--------------------------------------|--------------------------------------|
| Long-distance running | <input type="checkbox"/> Fast twitch | <input type="checkbox"/> Slow twitch |
| Sprinting | <input type="checkbox"/> Fast twitch | <input type="checkbox"/> Slow twitch |
| Triple jump | <input type="checkbox"/> Fast twitch | <input type="checkbox"/> Slow twitch |
| Marathon | <input type="checkbox"/> Fast twitch | <input type="checkbox"/> Slow twitch |

Worksheet 5.8a: Art

See Session 5.8 for instructions and examples for this activity.

Fill in the answers to the questions below.

Which athletics event are you studying?

Will your art sum up the feeling of the whole event or will it show one point?

What will you use to create your piece of art?

What is it about the event that you will show with your art?

Write down some descriptive words. It may have some of the following words but include at least three other words that aren't on this list:

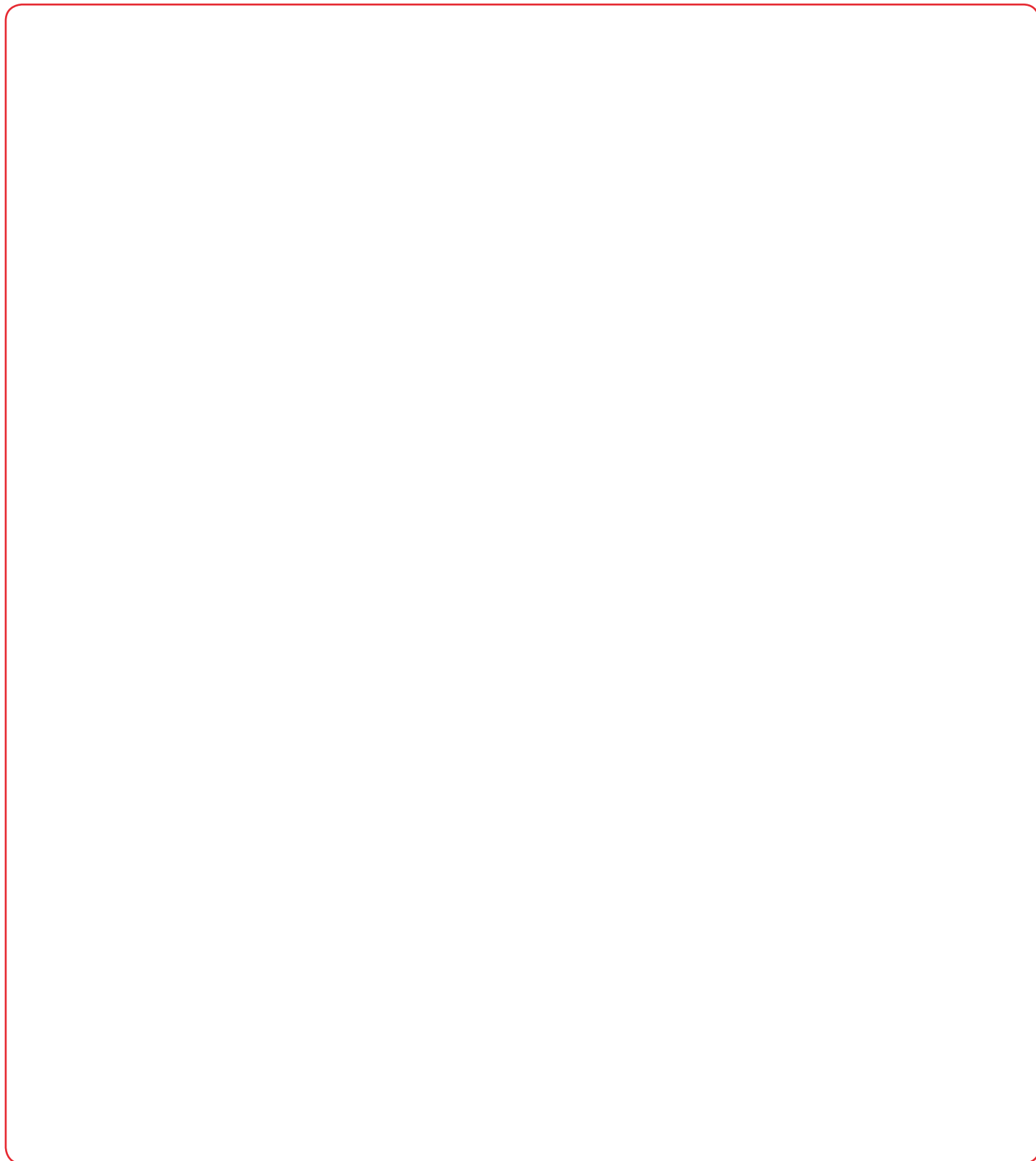
• Speed • Height • Power • Agility • Teamwork • Concentration • Victory.

How will you convey the idea of movement?

Worksheet 5.8b: Art

See Session 5.8 for instructions and examples for this activity.

Once you've completed Worksheet 5.8a, use this space to draw your artwork



Worksheet 5.9a: History

See Session 5.9 for instructions and examples for this activity.

You are going to prepare and present a 2.5 minute TV news report. You could pretend to be a news reporter and question people present at the event played by other children or members of your household. These could include athletes, their coach and family, track officials or a trackside reporter. Through their answers, your report should explain to the viewers what happened. To help you prepare your report, fill in answers to the questions below:

When did this event happen?

What happened?

What were the names of the main people or countries involved?

Why did it happen?

Why was it important to sport?

Consider each of the following to help you produce the best report possible:

- Rather than a reporter explaining what happened, it can be more effective if the reporter asks questions so eyewitnesses can explain in their own words.
- The report should have a clear introduction to set the scene quickly in few words.
- Consider adding useful and interesting information that helps the TV viewer enjoy and understand the report.

Worksheet 5.9b: History

See Session 5.9 for instructions and examples for this activity.

Once you've completed Worksheet 5.9a, use this space to write your script