

## **MOVEMENT AND PHYSICAL ACTIVITY**

## THROWING - anyone can do it!

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skill of throwing and as such can provide an effective platform for the learning and practise of this skill.

In this unit you will take on many roles, including that of coach, and participate in many activities, all designed to help you teach yourself and your friends to throw really well.

## YEAR 7—10 HEALTH AND PHYSICAL EDUCATION

#### **Student Resource**

# **MOVEMENT AND PHYSICAL ACTIVITY**

# THROWING - anyone can do it!

## **Unit Description**



Hand-eye coordination (processing the messages you receive through your eyes to make your hand do what the message says) and gross motor skills (larger movements your body makes, such as running) are important characteristics of many activities, both sporting and non-sporting. The development of these skills can have significant benefits for you across a range of areas. Even if you believe your ability is not as good as you would like it to be you can improve and become very skilled.

The ability to throw is an example of hand-eye coordination and gross motor skills in action. The skill of throwing is a key component of many sporting activities but is also found in many personal activities, such as playing with the family dog. If you can throw you can join in lots of different activities, helping you to lead an active life.

The sport of cricket, Australia's leading participation activity, is heavily reliant on the skill of throwing and as such can provide an effective platform for the learning and practise of this skill.

In this unit you will take on many roles, including that of coach, and participate in many activities, all designed to help you teach yourself and your friends to throw really well.

## **Unit Expectations**

In completing this unit, you will be expected to:

- learn, practise and demonstrate correct techniques/skills/movement patterns for the skill of throwing
- · participate in a range of activities
- look at your own skill set and work out ways you can improve
- demonstrate fair play and cooperation
- work collaboratively to design and apply solutions to address areas you have identified as requiring work
- apply criteria to make judgments about and refine your own and others' throwing
- demonstrate leadership across a range of movement and health contexts, including technique and skill development
- have fun!

#### **Assessment Task**

#### My throwing – where was I before and where am I now?

At the end of this unit you will compare your initial throwing technique and your technique after you have implemented a training program to highlight improvements, or otherwise, you have made.

You will have the opportunity to present video footage of your throwing, both at the start of this unit and at its conclusion. You will use this information and additional information gained from studying the throwing styles of your friends and expert full-time sportspeople and coaches.

At the end of this unit you will have completed many thinking tools, including a Double Bubble Map, PCQ Extension, Fishbone Diagram, Extent Barometer and Elimination Draw. You can use these as evidence to support your view on whether your throwing technique has improved.

Throwing is a fun activity and a skill you will use many times, even if you choose not to play sport. Throwing and the skills of throwing have many benefits, including helping your general coordination, and enhancing your reflexes and thinking skills. That's why it is a great skill to develop. You'll also find the process you follow in this unit can be helpful in any activity. Who knows, you may even become a personal trainer and do the things you will do in this unit as part of your job.

#### Throwing – developing the skill set

Throwing is a ballistic movement. In other words, it's a rapid, all-out, forceful movement that involves several complex movements occurring in a sequence.

This task and the tasks that follow are designed to help you:

- develop an understanding of the skills, technique and movement sequence involved in the throwing of an object
- · self-evaluate those skills, techniques and movement sequences
- develop a checklist for successful application of those skills, techniques and movement sequences, and
- design a program to develop those skills, techniques and movement sequences.

### Task 1: How's your throwing?

#### **Modified Tug of War**

In this game you will be placed into teams of six to eight.

In this modified version of 'Tug of War' you will not participate directly against other teams but rather against a stop watch. The aim of the game is to see how far your team can move the fitness ball in two minutes, by throwing and hitting it with balls your teacher will supply (each player has four throws so your team will need 24-32 balls).

The fitness ball will be placed at a distance of five metres from the line behind which you must throw. The team that can move the ball the furtherest from this point, via hits from the balls they have thrown, is the winner.

Keep a record of how far your team moved the ball in the two-minute time allowance as well as the number of times each of your team members (including you) hits the ball with their four throws.

## Task 2: Who is the best at throwing and why?

#### **Modified Tug of War Analysis**

On the opposite page you will find a thinking tool template called the Elimination Draw. Record the names of the eight members of your team on the Elimination Draw.

Now that you have an idea of the game, your teacher will ask you and your team to play again. Remember to record how far your team moved the ball and how many times team members hit the target.

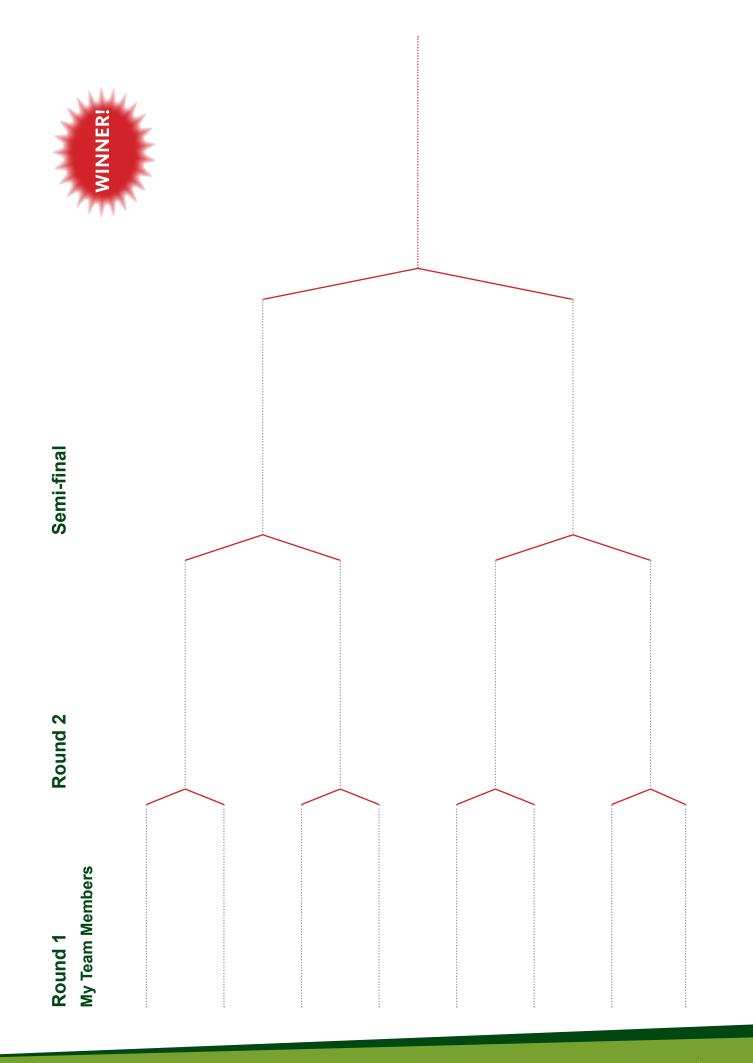
Now you are going to **decide** (which means to consider the people in your team and then make a judgement of their ability) which member of your team is the best thrower.

At the conclusion of the game review your team's performance with your team mates using the **Elimination Draw** to determine the player demonstrating the greatest mastery of the skill of throwing. (The Elimination Draw works like a tournament. For example, the first two names are discussed and the person who is the better thrower progresses through to the next round where the same process is continued until you determine who is the best thrower on your team). **Note**: You will have to come up with some criteria in order to help you with your decision. It may be that the best thrower missed all their shots at the ball so make sure you think carefully about what constitutes a good thrower.

With the results of the Elimination Draw film the techniques of the two semi-finalists. This will involve taking the final two throwers and filming them throwing. Note: Your teacher can provide advice as to how to film the throwers and may suggest an application to help you.

Having reviewed the footage of your team mates' throwing styles, identify what the throwers are doing well. Observe everything they do closely. Your teacher may provide you with some hints, such as how they hold the ball and stand, but basically it is for you and your team mates to decide what it is they are doing that makes them a good thrower. Use the Fishbone Diagram on page 6 to help you.





Topic: Who is the best at throwing and why? eyes are at the target is still Head side on

For everything you think they do well unpack these skill components on the **Fishbone Diagram** below. (You will see that an example is given for you)

#### Task 3: What do I do that an Australian cricketer also does?

By completing Task 2 you have identified key aspects of the skill of throwing. Now you are to examine your own throwing style and techniques by comparing your actions with that of an expert.

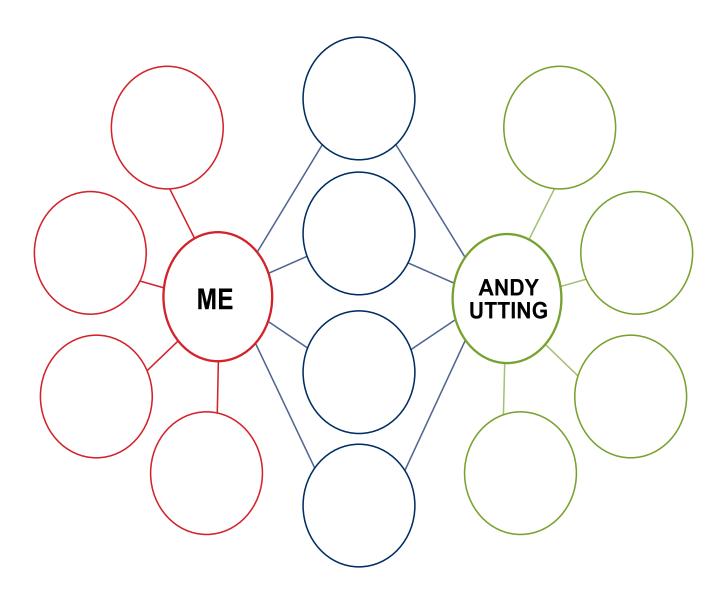
Here you will work with one of your team mates to film your own throwing techniques.

View the throwing masterclass by Cricket Australia coach, Andy Utting where he demonstrates the key components of throwing, at:

http://community.cricket.com.au/coach/new/throwing-program

Once you have your own footage and have reviewed what Andy Utting does, use the **Double Bubble Map** below to compare your technique with that of Andy. Look at the ways your throwing style is both similar and different to that of Andy Utting's.

Your teacher will explain how the Double Bubble works but essentially the similarities between you and Andy are recorded in the central bubbles. The things that are unique to you and Andy are recorded in the bubbles found around the main bubbles.



## Task 4: Skill evaluation – how good am I?

You now have an idea of both the correct techniques involved in throwing a ball and your own abilities, developed through the Double Bubble Map and your own video analysis. The next step is to evaluate (which means to consider your skills and make a judgement or decision as to where you sit in terms of expertise) your own skill level against the benchmarks identified in the footage of Cricket Australia's Andy Utting's throwing masterclass tutorial: http://community.cricket.com.au/coach/new/throwing-program.

Below you will find a tool called a PCQ Extension.

Perspectives	Data	Rating	100 Totally
grip		100 75 50 25 0	75 Fairly High 50 Medium 25 Low 0 None at all
stance		100 75 50 25 0	
		100 75 50 25 0	
		100 75 50 25 0	
		100 75 50 25 0	

The PCQ Extension has two examples of key skills associated with throwing, listed as perspectives (key skills associated with throwing well). Having analysed and evaluated the throwing techniques of your team mates, Andy Utting and others, as well as your own technique, add some more perspectives in the Perspectives column.

Complete the PCQ Extension on your own throwing technique by looking at each key skill from your perspective. For example, the Pros column should contain those throwing technique components you feel that you do and the Cons column should contain those aspects of the skill that you need to address in order to improve.

At the end of each row you will find an **Extent Barometer**. In other words, use the MAS strategy to improve your throwing. Try using the MAS strategy for other areas in your life that you are trying to improve, such as music performance, study or public speaking skills. For example, where do you rate yourself in terms of your stance? If you think you are an expert your ranking will be very high. If you are not at the expert level then your rating will be lower.

By now this process should give you a good understanding of where you are in terms of your throwing ability. You will use this information to help you improve.



## Task 5: Now I get better

Now that you have a deep understanding of your own abilities with regard to the skill of throwing you can use this knowledge to help you get better at each component of throwing.

Using the **MAS** strategy below, identify those elements of your throwing technique that you can modify, elements that need to be added to your personal technique, and any size adjustment you need to make, e.g. lengthen your arm extension.

<b>M</b> modify	
<b>A</b> add	
<b>S</b> size	

In other words, everyone can throw, and we can all improve. No matter what the skill, we can always **modify**, **add** and change the **size** in order to improve.

Based on your MAS you can now develop a training program illustrating the skill component of throwing you need to work on and the type of activity you will be doing to practise and improve the skill component. For example, you may feel that you need to **modify** your stance in order to get more side on. To do this you have drawn foot images on the floor to show you where to place your feet when you stand. This is how you will practise getting more side on when you throw.

Work with a partner to film yourself practising your movements and explaining what you are doing and why.

Your teacher will give you time to develop, work on and implement your training program.

Your teacher may also ask you to coach other members of your team using the training program you have developed. In other words, you are taking on the role of a personal throwing coach. This way, you are teaching your team mates the skills of throwing.

## Task 6: Have I improved? Let's see

Working with your team mates, replay the initial **Tug of War game** you played at the beginning of this unit. Record how far you and your team mates were able to move the ball this time as well as the number of times you and your team mates hit the target.

Did you improve?

As a final test of your team's throwing ability, play **Tug of War** against each other. Here your team faces another and you try and move the ball towards your opponents. After two minutes the team who has moved the ball closest to their opponents is declared the winner.

#### **Task 7: Assessment Task**

Compare your initial throwing technique and your technique after you implement your training program. What do you notice?

### **Completing the Task**

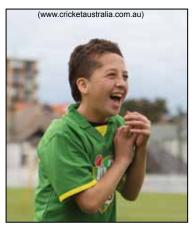
The final step is to complete a **Double Bubble Map**. On one side of the Map will be your technique at the start of this unit and the other your technique at the end of the unit. There may be lots of similarities but it is hoped you will notice lots of changes in your throwing technique.

Using this information as well as supporting evidence (video footage pre- and post-unit and your own training programs) you should identify those aspects of the technique of throwing you have improved over the course of this unit.

You should now be able to write a report showing the improvements you have made to your throwing technique, provide evidence to support this and show, through your training program, how you achieved your improved results.

#### Note:

The format and sequence outlined in this unit can be used for any skill acquisition. Other skills such as catching, batting or bowling can be developed in this manner using the principles outlined in this unit. So if you want to improve any skill think about the process you have followed here.





# Glossary

Term	Meaning
back swing	The movement of the arm backward to a position from which the forward swing is made.
ballistic skill	A rapid, all-out, forceful movement that reaches peak acceleration within milliseconds of its initiation.
follow through	To continue the movement of a throw after the point of release.
grip	To take a firm grasp of something. In the throwing context the grip should involve the first and second fingers in conjunction with the thumb holding a ball or similar object.
gross motor skill	Movement that comes from large muscle groups and whole body movement. Usually involves head to toe actions.
hand-eye coordination	The coordinated control of eye movement with hand movement and the processing of visual input to guide reaching and grasping along with the use of proprioception of the hands to guide the eyes.
movement challenges	Movement tasks that require individual students or groups of students to solve a problem in order to successfully complete the task.
movement sequence	The combination of fundamental movement skills and movement elements to enable the body and/or objects to move in response to a stimulus.
skill-related fitness	Includes components such as agility, balance, coordination, reactions, rhythm, power and speed.
stance	Alignment of the feet sideways to the target allowing the use of the body and hips in the throw and not just relying on the shoulder.
throw	Any software or hardware that interacts with real-world locations. To propel an object forward with force through the air by a movement of the arm and hand.



# GET INVOLVED AND PLAY CRICKET, THERE IS SOMETHING FOR EVERYONE OF ALL ABILITIES.





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