# How can we solve problems when moving?

**PDHPE Stage 2 learning sequence – Lesson 5-6**

**Learning sequence description**

Students explore and practise different kicking techniques to propel objects towards a target or goal. They predict the effectiveness of a range of kicking techniques by testing alternatives to solve a movement challenge. Students will also explore how to combine different elements of effort, space and time with objects to successfully complete a kicking challenge.

## Syllabus outcomes and content

**PD2-4 performs and refines movement skills in a variety of sequences and situations**

**PD2-5 applies strategies to solve movement challenges**

**PD2-9 demonstrates self-management skills to respond to their own and others’ actions**

**Key inquiry question - How can we move our bodies to perform skills in different ways?**

* perform and refine movement skills in a variety of movement sequences and contexts, for example:
* explore and practise different techniques to propel objects towards a target, e.g. running, jumping and throwing techniques in athletics and target games
* demonstrate variations of force and speed in movement, e.g. slow, fast, light, strong, sudden, sustained, using the body and objects
* adapt movement skills to improve accuracy and control in a variety of contexts
* practise and apply movement concepts and movement skills to create and perform movement sequences, for example:
* combine elements of space, time, objects, effort and people when performing movement sequences (ACPMP047)

**Key inquiry question - How can we demonstrate our understanding of movement to solve challenges?**

* pose questions, test solutions and use problem-solving strategies to solve movement challenges, for example:
* test alternative responses to movement challenges and predict the success or effectiveness of each, e.g. create space, positional awareness in games
* draw on and apply prior knowledge, feedback and skills to solve movement challenges
* identify how to modify plans within a game to achieve success
* participate in physical activities which require problem-solving and persistence to achieve a goal

**Key inquiry question - How can we include others in physical activity?**

* apply basic rules and scoring systems, and demonstrate fair play when participating in physical activities, for example: (ACPMP050)
* contribute to fair decision-making in physical activities by applying the rules safely and appropriately

[PDHPE K-10 Syllabus](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/pdhpe/pdhpe-k-10-2018) © 2018 NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales.

## Lesson 5 – Kicking golf

Students are learning to:

* practise and compare different types of kick and identify which ones are easier and harder.
* predict possible outcomes while using different types of kick and pieces of equipment.
* adapt kicking skills to improve accuracy and control across different contexts
* select and use equipment appropriate for their learning environment.

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| Item | Learning experience | Differentiation strategies and/or adjustments | Resources |
| 5.1 | Students create 3 targets or small goals that you they can safely kick a soft ball/object towards. They choose a ‘starting point’ where they will kick the object from. Students place each target/goal at different distances from the ’starting point’. |  | A soft object to kick.  3 objects to act as a target/goal. |
| 5.2 | Explain to students their challenge is to practise and compare three different types of kick. The three types of kick are  kicking the ball on the ground  kicking a ball off a tee (slightly raised off the ground). An example of a tee may be a cone/marker, a small pillow, several pieces of paper scrunched up and flattened slightly,  kicking a ball out of your hands (also known as a ‘punt’)  Refer to Table 1 for examples. |  | Resource 1 – Student workbook – Table 1 |
| 5.3 | In previous lessons students have used a variety of throws to complete movement challenges. Discuss the following questions  Which throwing style do you think was most effective? Why?  Do you think you can transfer anything you learned about throwing to similar challenges using the skill of kicking? Explain your answer  Which kicking style do you think will be most effective? Why? Explain your answer |  | Resource 1 – Student workbook |
| 5.4 | Students play ‘kicking golf’. Kick the ball/object towards the target/goal. They should aim to hit the target or score a goal. Pick up the ball/object from where it landed and kick it again until you have hit the target or scored a goal.  Repeat the challenge 5 times for each of the 3 targets |  | A soft object to kick.  3 objects to act as a target/goal. |
| 5.5 | Students record how many throws it took to hit the target in Table 2. |  | Resource 1 – Student workbook – Table 2 |
| 5.6 | Discuss the following questions  Which type of kick was most successful? Why?  How did you adjust your body position to perform each type of kick differently?  How did you adjust the amount of force you used when kicking? Explain this answer |  | Resource 1 – Student workbook |
| 5.7 | **Opportunity for monitoring student learning**  Movement challenge: ‘Obstacle golf’ – collection of student work  Students engage in the movement challenge ‘obstacle golf’ and record responses in student workbook. Where possible, students may capture their performance using video recordings.  **What to look for:**   * predicts possible outcome of kicks (refer to 5.3 in student workbook) * explains how they adjusted the effort required/used to kick (refer to 5.6 in student workbook) * demonstrates (if video capture) and describes how kicking style was adapted to solve the movement challenge (refer to 5.6 in student workbook) * explains which type of kick was most and least successful and why (refer to 5.6 in student workbook) * selects and uses equipment safely, suitable for their environment (refer to 5.1, 5.4 in student workbook). |  | Resource 1 – Student workbook  Discussions and/or videos of student performance and discussions where appropriate. |

## Lesson 6 – Obstacle kicking golf

Students are learning to:

* predict the outcome of their kicks by considering how space, time and effort influence the accuracy of their kicks
* adapt kicking skills to improve accuracy and control across different contexts
* explain which approach was most successful and why
* select and use equipment appropriate for their learning environment

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| Item | Learning experience | Differentiation strategies and/or adjustments | Resources |
| 6.1 | Students create 3 targets or small goals that you they can safely kick a soft ball/object towards. They choose a ‘starting point’ where they will kick the object from. Students place each target/goal at different distances from the ’starting point’. |  | A soft object to kick.  3 objects to act as a target/goal.  3 separate objects that will act as obstacles. |
| 6.2 | Students choose or create at least one object that will act as an obstacle for each target. The obstacle needs to be placed between the ’starting point’ and the target. Refer to Table 2 for examples. |  | 3 soft objects throw.  3 objects to act as a target.  3 separate objects that will act as obstacles.  Resource 1 – Student workbook – Table 2 |
| 6.3 | Explain to students to play ‘Obstacle kicking golf’ they will be able to choose the kicking style they use for all of their kicks.  Discuss the following questions before beginning. Record their answers.  Which kicking style did you prefer to use in the previous lesson? Why? (Choose from kicking on the ground, kicking from a tee, kicking out of your hand) Explain your answer.  Which kicking styles will you use in these challenges? Explain when each throwing style would be most suitable?  How can you adjust your kicking style to change the amount of effort you use to kick the ball/object? Why will this be important?  How can you adjust your throwing style to throw your object accurately and avoid the obstacle? Why will this be important? Explain how you plan to throw your object, for example, over, under, through the obstacle. |  | Resource 1 – Student workbook |
| 6.4 | Students play the game - kick the ball/object towards the target/goal. Students should aim to hit the target/score a goal. Pick up the object from where it landed and kick the all/object again until the target is hit/a goal is scored.  Refer to Table 5 for examples of what ‘Obstacle golf – testing alternatives’ may look like. |  | A soft object to kick.  3 objects to act as a target/goal.  3 separate objects that will act as obstacles. |
| 6.5 | Record how many kicks it took to hit the target/score a goal. Repeat the challenge 5 times for each of the 3 targets |  | Resource 1 – Student workbook – Table 4 |
| 6.6 | Discuss the following reflective after completing all attempts. Students record their answers.  Which type of kick was most successful? Why?  How would you adjust your kicking to improve your accuracy?  What adjustments do you think you should make to each target to make the challenge at the right level of challenge for you? Consider the distance of the target, the placement of the obstacle, the type of object used as an obstacle. |  | Resource 1 – Student workbook |
| 6.7 | Students play ‘Obstacle kicking golf’ again and apply the adjustments they suggested. |  | A soft object to kick.  3 objects to act as a target/goal.  3 separate objects that will act as obstacles |
| 6.8 | Record how many kicks it took to hit the target/score a goal. Repeat the challenge 5 times for each of the 3 targets |  | Resource 1 – Student workbook – Table 5 |
| 6.9 | Discuss the following question  Were the changes you suggested successful? Why? Why not? |  | Resource 1 – Student workbook |
| 6.7 | **Opportunity for monitoring student learning**  Movement challenge: ‘Obstacle golf’ (opposite hand) – collection of student work  Students engage in the movement challenge ‘obstacle golf’ using their opposite (or non-dominant) hand. Record responses in student workbook. Where possible, students may capture their performance using video recordings.  **What to look for:**   * predicts possible outcomes of kicks * explains strategic selection of the type of kick used (refer to 6.3, 6.6, 6.9 in student workbook) * explains how they adjusted the effort required/used to throw (refer to 6.3 in student workbook) * describes (demonstrates – if captured on video) how kicking style was adapted to solve the movement challenge (refer to 6.3 in student workbook) * explains which approach was most and least successful and why (refer to 6.6 and 6.9 in student workbook) * selects and uses equipment safely, suitable for their environment (refer to 6.1, 6.2, 6.4 and 6.7 in student workbook). |  | Resource 1 – Student workbook  Discussions and/or videos of student performance and discussions where appropriate. |

**Reflection and evaluation**

These simple questions may help you reflect on your students’ learning and plan for next steps.

What worked well and why?

What didn’t work and why?

What might I do differently next time?

What are the next steps for student learning based on the evidence gathered?