

Walking for Water Lesson 3

Curriculum links:

- **Computing:** computational thinking: logical reasoning, decomposition, abstraction, programming; sensors, using a variety of software
- **Science** sensors **P.E.** Exercise, **PSHE** Healthy mind and body, **Design and Technology** Product design, **Maths** estimating, calculating time and distance, **Geography** understanding the world, desert, sub-saharan Africa, mapping using digital tools

Skills: Empathy, problem solving, team working, designing, creative thinking, presenting

Resources: Teacher Guide (presentation download, lesson plan download, worksheet / spreadsheet download), [MakeCode editor](#), micro:bit step-trackers or pedometers, photography equipment, time for students to complete their walk, printouts of slide 6, evaluation sheet.

Background:

It is assumed that you have first completed the Non-communicable disease introductory lesson and Walking for Water lessons 1 and 2.

Introduction

In this lesson, which is split in half to enable them to complete their walk outside lesson time, students plan how they can achieve their goal and create a short presentation for an assembly to raise awareness of how children like Aysha live. It is assumed students have some knowledge of using digital mapping tools and presentation software, though if necessary you can allocate additional time easily to these skills.

Teacher guide:

Learning objectives

- To map and plan walking routes using digital tools
- To use a step-counter to walk the same number of steps as Aysha does in 1 day over 4 days
- To plan, create and give a short presentation to raise awareness of children like Aysha
- To evaluate a project

Agenda

- Introduction (5 minutes)
- Planning the walk (15 minutes)
- Planning the presentation (5 minutes)
- Tracking steps (over 4 days)
- Creating the presentation (15 minutes)
- Presentations (15 minutes)
- Wrap up (5 minutes)

Introduction

- As students enter the room, replay the film of Aysha to focus them on the purpose of their challenge (slide 2) and remind them of their challenge and their work last lesson to create their step tracker (slide 3 and 4).

Main activities

Planning to walk

- Split students into small groups and ask them to work together to plan how to meet their step targets using the worksheet or spreadsheet if you wish (slide 6)
- Encourage them to use digital tools such as Google Earth, Google Maps and reasonable estimations to plan routes they can walk, ensuring they are safe at all times (e.g. around school field or the school hall at lunchtime, walking to school if possible, going out with a family member on a long dog walk etc). You may decide to do some walks as a class if you have space and time and can plan these together.

Planning the presentation

- Give groups a copy of the presentation planning storyboard and explain you would like them to plan a short (max 3 minute) presentation to raise awareness of children like Aysha and explain what they have been learning about. *You could make this a film if you have the equipment.*
- Give them a suitable amount of time to plan what they would like to include in their presentation (e.g. explanation of the Water Burden, a description of why they created their step-tracker), complete the storyboard and arrange to take suitable images (ie an image of each of the group walking, their step-trackers etc).
- You may wish to give them a criteria e.g. max 5 slides, 4 images etc and use the planning sheet on slide 7.

Tracking steps

- Ensure all students have access to a pedometer and give them the agreed amount of time to track their steps.
- If you wish you could ask them to track how they completed their steps on their worksheet or spreadsheet and compare their actual distances and steps to their estimates.
- Discuss if their step-trackers were effective and what amendments they would like to include in the future.

Creating the presentation

- Once all students have completed their steps, give them a suitable, focussed amount of time to complete their presentation.
- Ask groups to proof read each others' presentations to give constructive feedback.

Presentations

- Invite groups to give their presentations. Ideally this would be to another class or year (e.g. in assembly) to raise awareness.
- Invite peers to give feedback if you wish and you could give out certificates or prizes for the most effective presentations and step-trackers.

Lesson wrap up

- Invite students to share what they have learnt from this activity and remind them of the micro:bit challenge (slide 8) and that they will start to work on their own innovation next lesson.
- Revisit the learning objectives if you wish on slide 9.

Extension / homework

- Students could complete the evaluation sheet on slide 10.
- You could extend this topic in many ways including raising awareness of water usage around the home, tracking walking habits, learning more about Ethiopia, writing a campaigning letter etc.

Differentiation

Support:

- Group students sensitively so all can be involved and encourage students to contribute according to their strengths (perhaps they could be the photographer, or excel in presenting to others).

Stretch & challenge:

- Students can be challenged to plan their walk in detail using more sophisticated tools and to create and give a persuasive, highly effective presentation to raise awareness.

Opportunities for assessment:

- Informal assessment during activities, presentations and through questioning.
- More formal assessment of students' worksheets, presentations and evaluations.