The Making the Most Challenge Video Transcript

Music Plays

Graphic Text Display

The Maths Challenge.

The Making the Most Challenge.

SCENE 1

Host

(Stands holding large wooden box)

Hi! My name's Shane and I work here at the Centre for Education and Research in Environmental Strategies, also known as CERES.

Welcome to the Making the Most challenge.

CERES is a sustainability education centre that focuses on reducing the amount of resources that we use. As a planet, we have very limited resources to share with all the plants, animals and people that inhabit the Earth. So we all need to make sure that we make the most of the resources we have.

SCENE 2

Graphic Text Display

Maths Concepts.

Host

When it comes to using resources, maths is very important. CERES collects and analyses data so that we can make sure we're using our resources in the most efficient way.

At CERES, we use maths to collects data for electricity and water via our metering systems. We also use maths to track waste and biodiversity, by simple counting and recording. (And) all the supply chains, for areas such as our organic food market, use similar principles.

By doing this, we optimise the resources that we have.

SCENE 3

Graphic Text Display

The Challenge.

Host

In this challenge, you and your family will need to optimise your use of scarce resources whilst planning and building imaginary plant enclosures. You will need to use your knowledge of shapes to find the best solutions.

(For) this challenge, you will need 19 equal lengths to make as many different shapes as possible. You can choose 19 toothpicks, matches (with parental guidance) or even pens. These 19 straight items represent pieces of fence for you to build your plant enclosures. If you don't have 19 items for each person – team up!

Graphic Animation

19 straight lines move around to form the sides of different shapes.

Host (off-screen)

Okay, so using your 19 fences, build the maximum number of different shaped enclosures that you can. They may not share any edges, so that means there must be a gap between each enclosure. How many different enclosures can you make?

Host

Now try again, but this time, build your enclosures so they share common edges. How many do you think you can build? … Five? Even go for six!

If you want, take a photo of your enclosures and submit them on the challenge website, we'd like to see how you make the most of your resources.

(Pauses, then looks around)

Where did I put that box?!

Graphic Text Display

The Education State. Victoria State Government.

Music Stops