



EPISODE 302

ODD BEGINNINGS PART 2

The case continues! Your fellow agents continue on their top secret mission to find THE legendary lucky 44-leaf clover! How do they beat the Sticky Sisters to the clover?

CASE SUMMARY

CASE: Find and save the legendary Odd Artifact—the 44-leaf clover.

OUTCOME: We beat the villainous Sticky Sisters and solved the case! We used Omar's souvenir to measure the right door that led us into the ancient Odd Squad Headquarters, and then used a pulley, wheel and axle, and a wedge to finally retrieve the Odd Artifact!

COLD CASE EXTENSION ACTIVITY

Something VERY ODD has happened! All the parts to the simple machines are flying and getting away! To get all the parts back and stop them from flying you must create your own simple machine—a wheel and axle!

To complete your mission you will need:

1. F4 paper plates
2. 1 pencil
3. Glue
4. String

STEP 1: Glue two paper plates together so that the two tops of the plates are facing each other. Do this for two sets of plates.

STEP 2: Take a pencil and stick it through centers of both sets of plates.

STEP 3: Push your wheel and axle and watch it roll!!

STEP 4: Now attach a string to your axle (the pencil) and now try pulling your simple machine!



SYNOPSIS FOR TEACHERS/PARENTS:

In this episode Agent Opal and Agent Omar go on a mission to find and save the legendary Odd Artifact—a 44-leaf clover. During their mission they encounter several obstacles that require them to 1) use measurement skills and measurement tools and 2) use simple machines such as pulleys, to achieve their mission.

This episode teaches children how they can use conventional measurement tools, such as rulers, to measure items, and also unconventional measurement tools, such as objects, to measure different things. It also introduces children to the effectiveness of using simple machines.

CURRICULUM EXPECTATIONS:

Grade 2 Science – Understanding Structures and Mechanisms: Movement

- 1.1** Assess the impact on society and the environment of simple machines that allow movement (e.g. common mechanisms and simple machines make it easier to carry out tasks that require movement because less force is needed).
- 2.3** Investigate the structure and functions of simple machines.
- 3.3** Identify the six basic types of simple machines—lever, inclined plane, pulley, wheel and axle—and give examples of ways in which each is used in daily life to make tasks easier.
- 3.4** Describe how each type of simple machine allows humans to move objects with less force than otherwise would be needed.

Grade 1 Mathematics: Measurement

Demonstrate an understanding of the use of non-standard units of the same size for measuring.

Construct, using a variety of strategies tools for measuring length, heights, and distances in non-standard units.

Compare two or three objects using measurable attributes and describe the objects using relative terms.

Compare and order objects by their linear measurements, using the same non-standard unit.

Grade 2 Mathematics: Measurement

Estimate and measure length, height and distance, using standard units and non-standard units.

Select and justify the choice of a standard unit (i.e. centimetre or metre) or a non-standard unit to measure length.

Compare and order a collection of objects by mass and/or capacity, using non-standard units.

Grade 3 Mathematics: Measurement

Estimate, measure, and record length, height, and distance, using standard units.

Estimate, measure, and record the capacity of containers, using the standard unit of the litre or parts of a litre.

Compare and order objects on the basis of linear measurements in centimetres and/or metres in problem solving contexts.



THIS OR THAT!

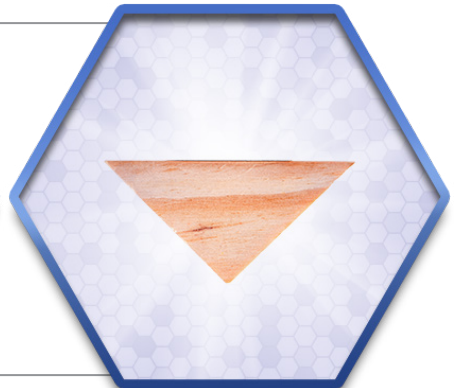
QUESTION #1

A simple machine is a tool to make hard work easier. Which one of these photos is a type of simple machine?



QUESTION #2

What simple machine should be used to make things easier to push?



QUESTION #3

What is the best tool to use for measuring a liquid?





TRUE OR FALSE

QUESTION #1

A wedge is a simple machine that attaches things together!



QUESTION #2

A pulley uses a rope draped over a wheel. You have to pull down on one side to make lifting the other side easier.



QUESTION #3

There are 100cm in 1m.



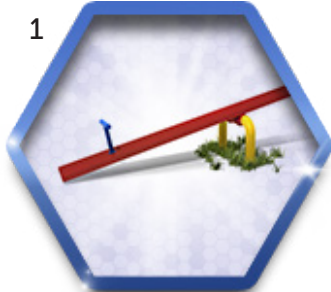
1. FALSE! A wedge is a simple machine that splits stuff apart! 2. TRUE! Pulleys are a simple machine that helps make lifting heavy easier! 3. TRUE! 1m is the same length as 100cm.



COLUMN MATCHING

Match the pieces to make a simple machine!

1



2



3



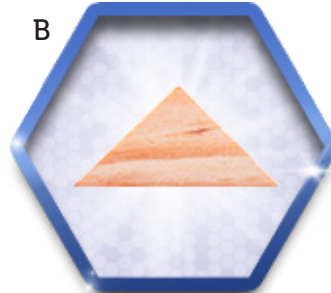
4



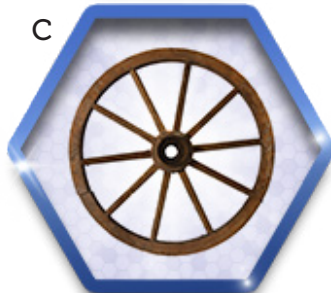
A



B



C



D

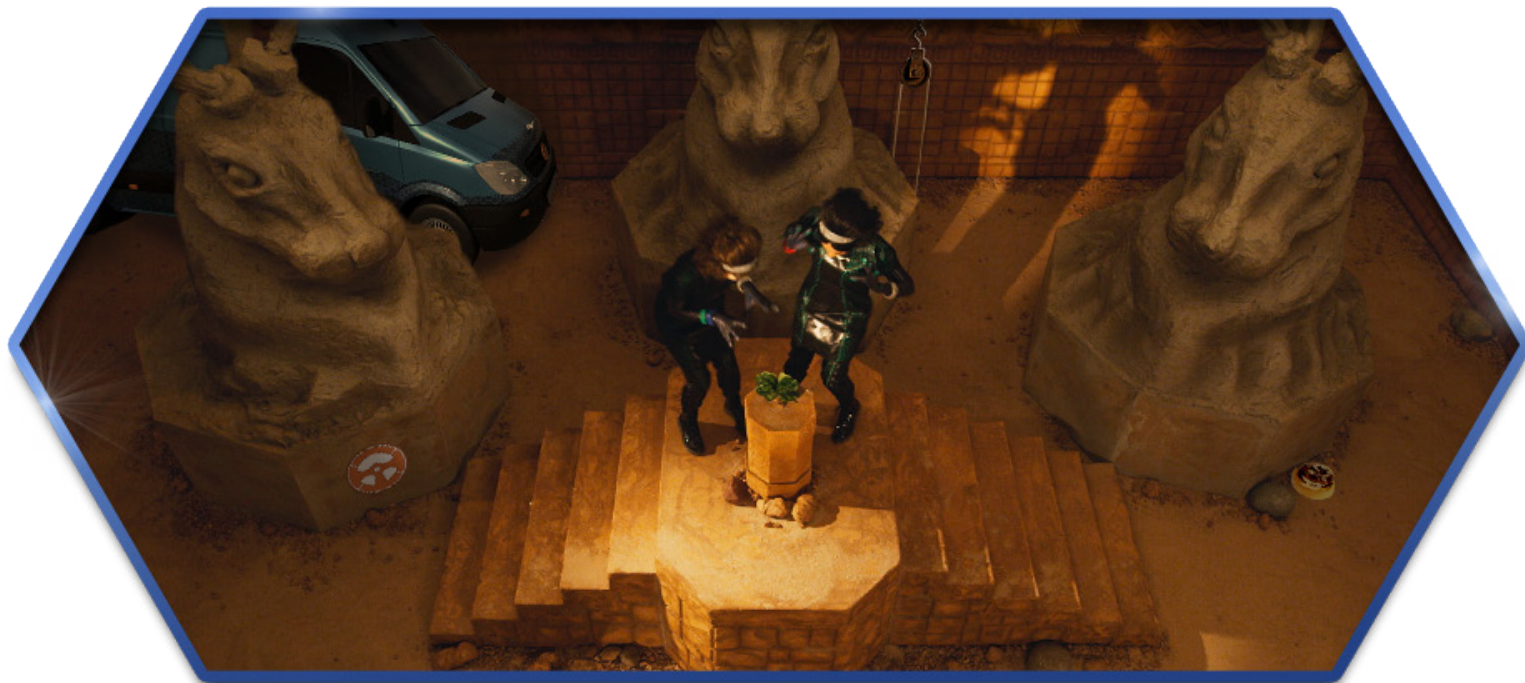


1. B 2. C 3. D 4. A



SEARCH AND FIND

Can you find the following?



44-leaf clover



Cinnamon Buns



OSMU Badge



Pulley



Mobile Unit van



Sticky sisters