



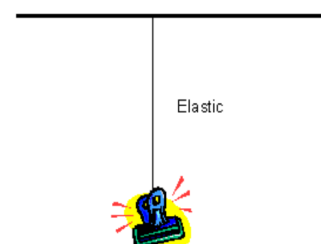
Bungees

Stage	Strand	Strand Unit
1	Measures	Measuring

Learning Outcomes	Maths Concepts
Through appropriately playful learning experiences, children should be able to demonstrate an awareness that attributes such as length, weight, capacity and area can be measured and compared.	- Objects have attributes that can be measured such as length, weight, capacity and area. - We can compare and order things by how much of a particular attribute (physical quantity) they have relative to each other.

Learning Maths

This learning experience will help learners to visualise how items compare in terms of weight. A piece of elastic acts as a bungee to compare the weight of different objects by measuring how far each stretches. Prepare a 'Bungee' by tying a piece of elastic to a clothes peg or bull clip and attaching it to a metre ruler suspended across two desks.



Hang a piece of paper from another metre stick behind the elastic for recording. Learners attach a range of small, everyday items, to the peg, one at a time, before letting go. (Ensure there is a weight difference between the objects). Allow the elastic to come to rest and record the distance the bungee extends on the paper. Use the same page to record the distance travelled by all the objects to facilitate comparing their weight.

Understanding and Connecting	Communicating	Reasoning	Applying and Problem Solving
<i>The learner</i>			
Explores and handles everyday objects and items.	Uses appropriate vocabulary to describe and compare the weight of objects.	Predicts how measurable attributes of objects will compare to each other.	Explores the procedures of measuring weight by making direct comparisons in meaningful contexts.



Teaching Maths	
Fostering Productive Disposition	Encouraging Playfulness with Mathematics
Give learners an opportunity to interact and work collaboratively with their peers in mixed ability pairs.	Provide opportunities for learners to explore and investigate.
	Emphasising Mathematical Modeling
	Provide a variety of materials to record how learners measured the distance travelled by the bungee in a way that makes sense to them.
Using Cognitively Challenging Tasks	Promoting Maths Talk
Assist learners to make connections between prior and new knowledge; and different areas of mathematics.	Encourage learners to share their findings through strategic questioning. Key questions might include; • How did you know which object was the heaviest/ lightest? • How did you measure how far the elastic went each time? • How many cubes did you need to measure how far the ... fell?
Assessing Maths	
• Does the learner demonstrate an understanding of weight? • Can the learner justify his/her thinking? • Can the learner organise objects in terms of weight from heaviest to lightest?	
Source	
PDST Measures Manual page 136	