



A Well-Balance Math Experience



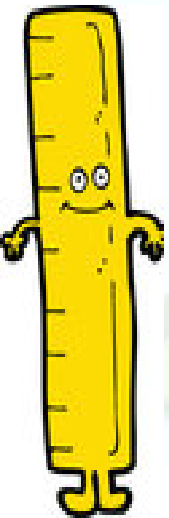
Body Competence

Anderson, Casey,
and Kerrigan



Understanding

Measurement





Spatial Awareness: the ability to be aware of oneself in space

An awareness of spatial relationships is the ability to see and understand two or more objects in relation to each other and to oneself.

Body Competence Critical to Conceptual Understanding of Measurement



When a child is developing their spatial awareness they begin to become aware of their placement in relation to the things around them. They need to understand their location as well as concepts like distance, speed and placement (over, under, behind etc.).

Body awareness is about understanding where our bodies are in space, and where and how we move.

It involves a combination of the vestibular, tactile, and proprioceptive sensory systems.

Understanding the information received from all three of these systems can increase body awareness of where our body starts and ends, and how it fits/moves through the environment.



Activities to Build Body Awareness

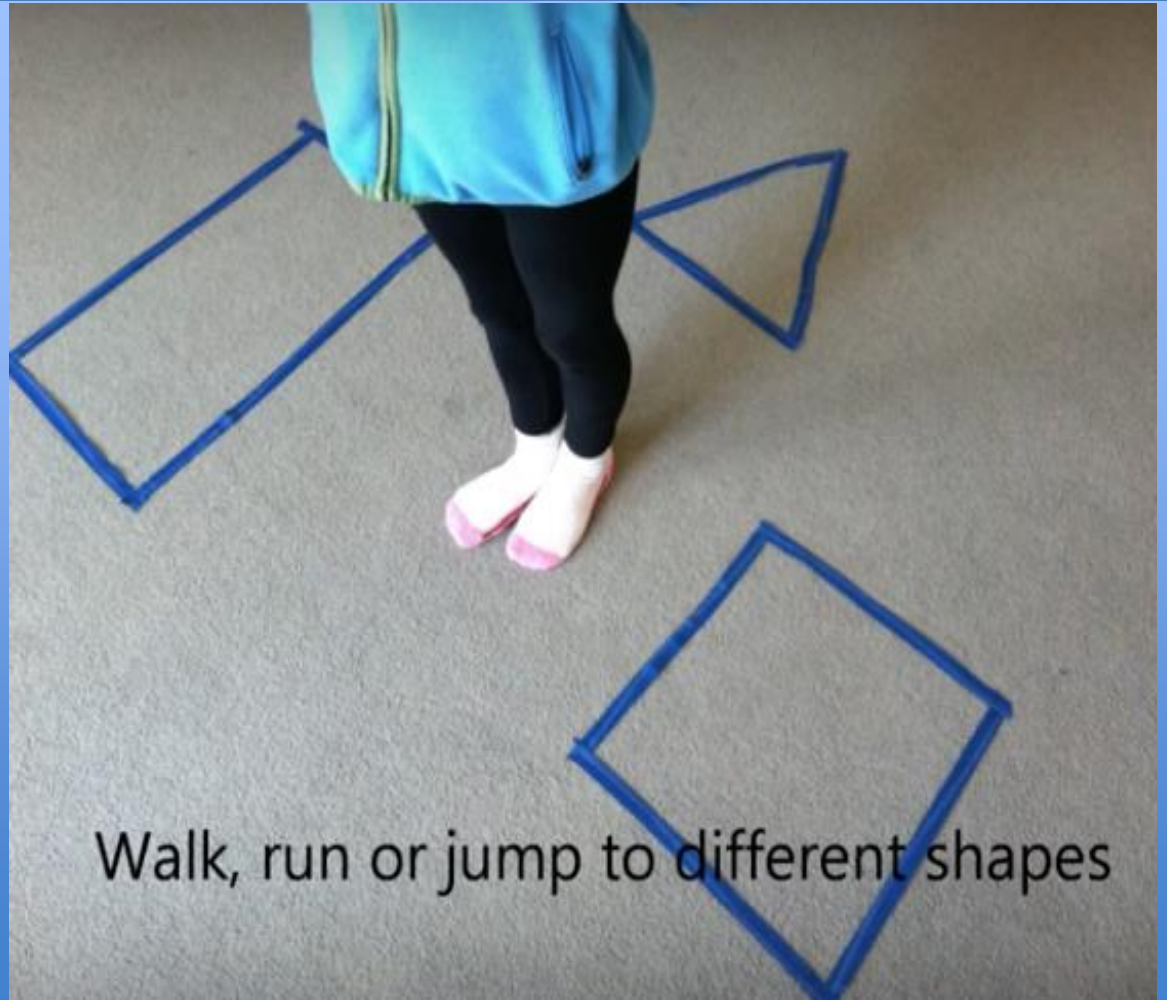
- Body Image
- Body Concept
- Body Schema
- Laterality
- Directionality



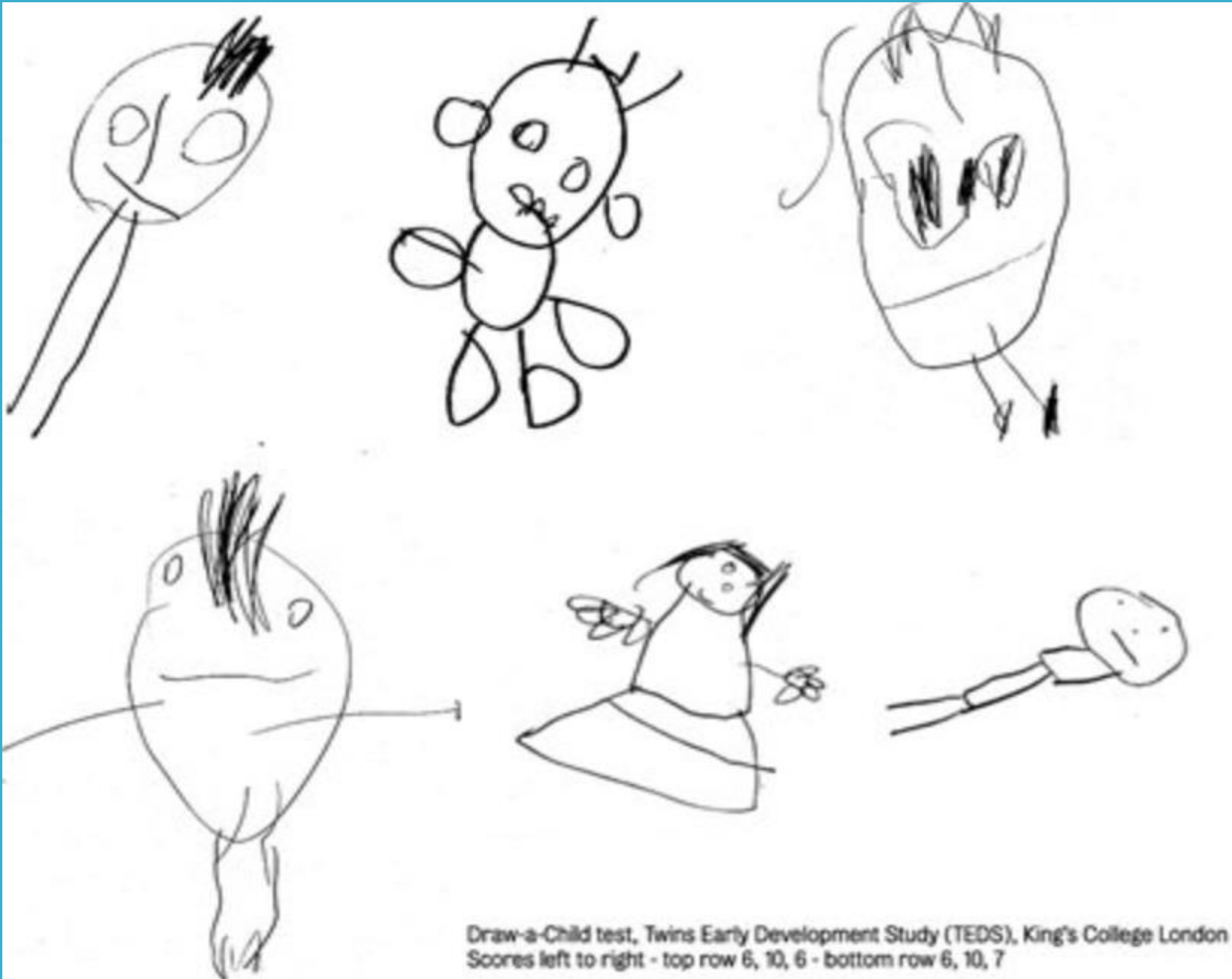
Fancy Footwork

Teaching Left & Right

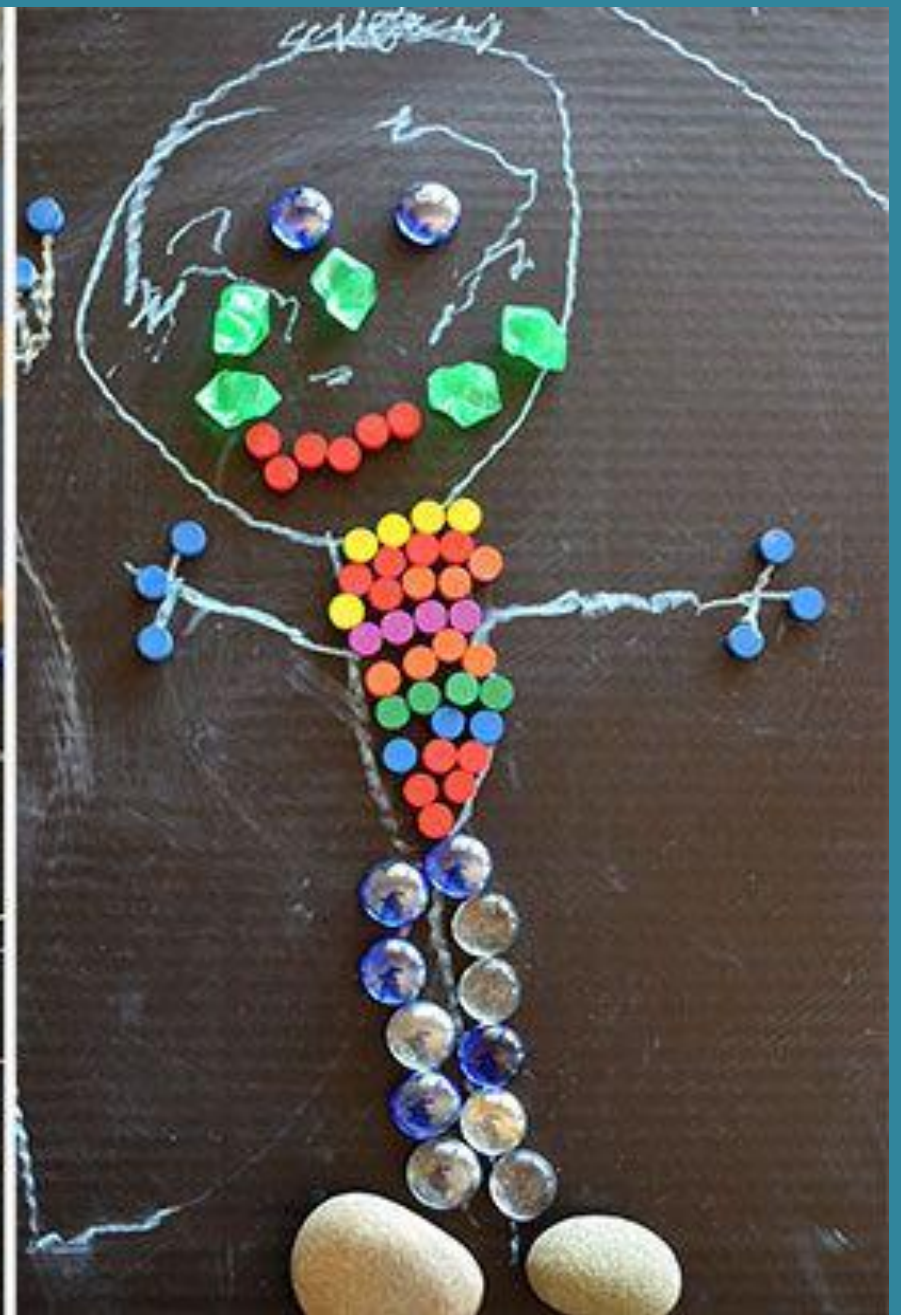
**5 Motor Skill
Activities Using
Painter's Tape**



Walk, run or jump to different shapes



Draw-a-Child test, Twins Early Development Study (TEDS), King's College London
Scores left to right - top row 6, 10, 6 - bottom row 6, 10, 7



Body Awareness

What The Body Can Do

Body awareness involves knowledge of
the body parts

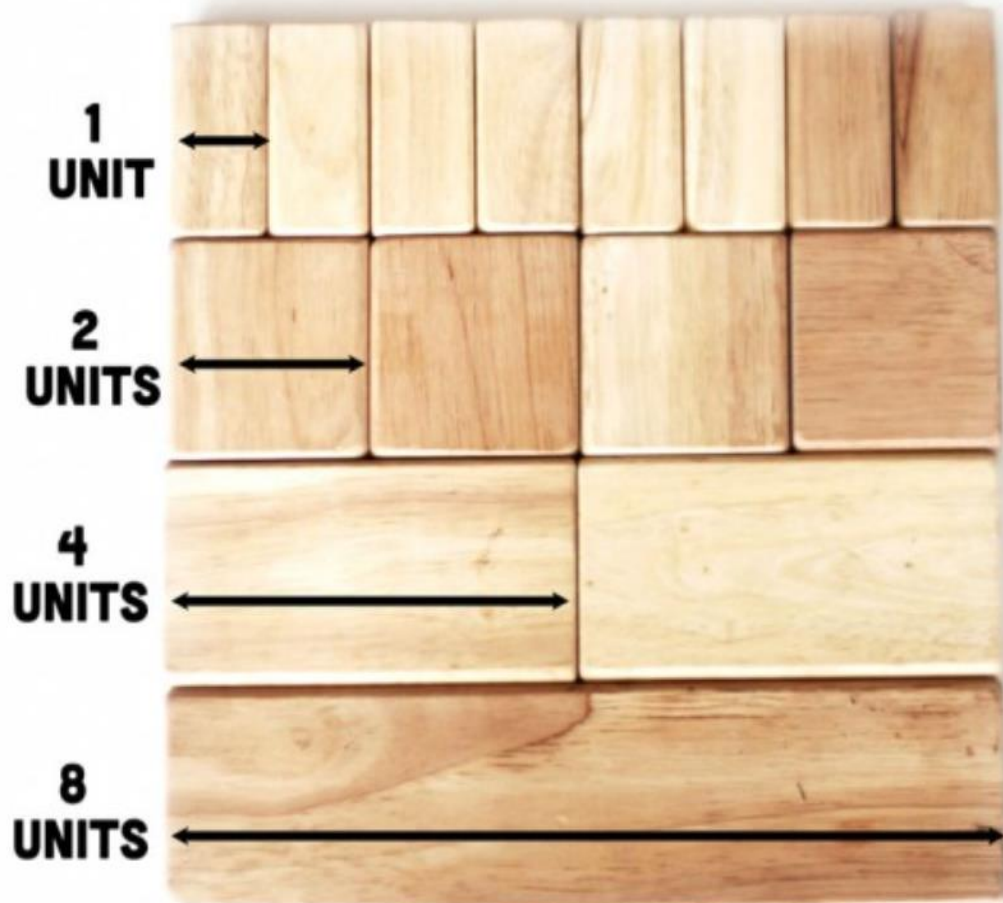
what the body parts can do and

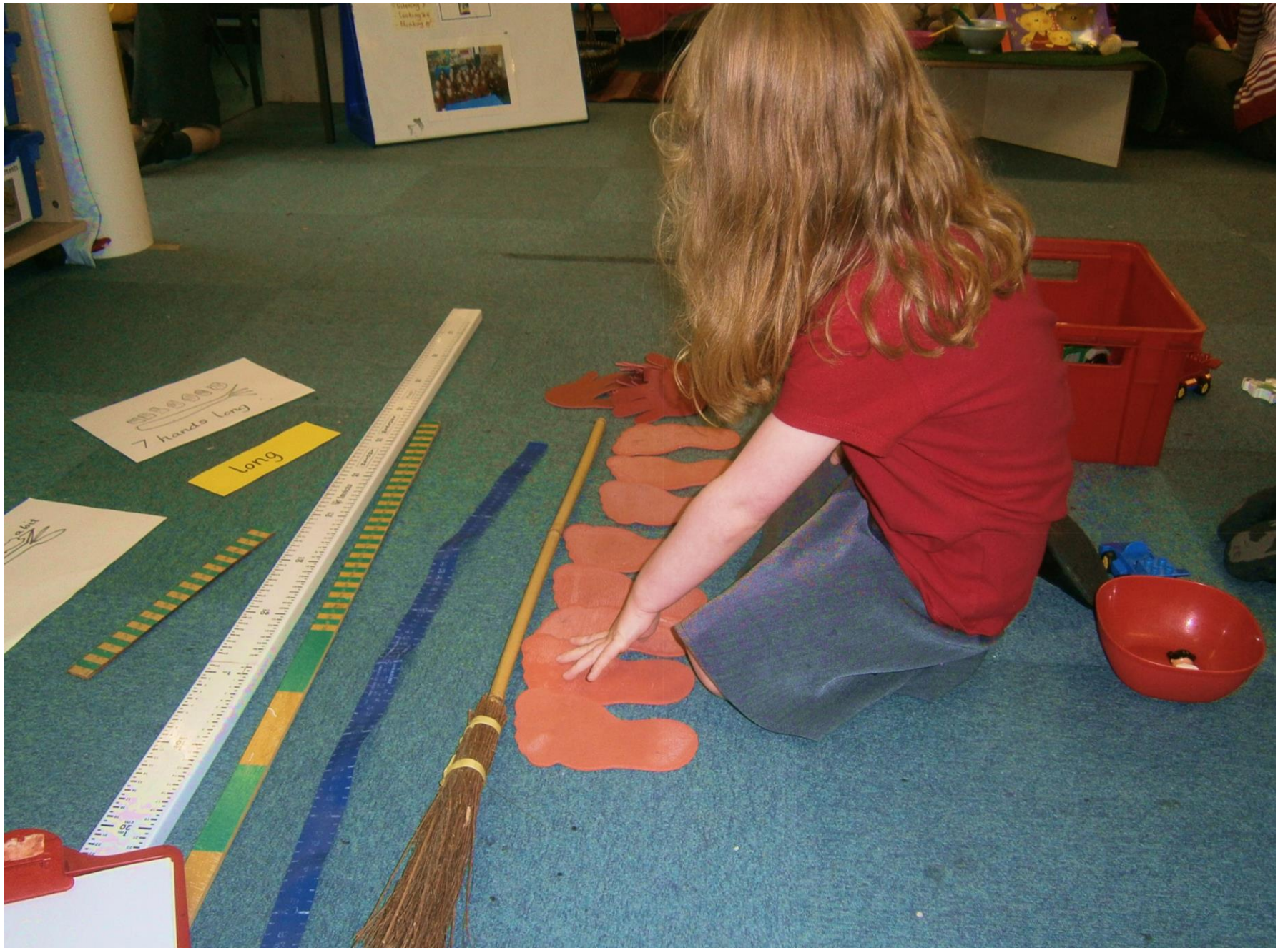
how they can do it





6 math activities WITH UNIT BLOCKS






HOW BIG IS A GIANT'S FOOT?

Name _____

Measuring up to the **GIANT.**



Use the Giant's foot to measure objects around the room. Find objects that are **longer** or **shorter** than the Giant's foot. Record your information on the chart below.

Longer	Shorter
weather class Jobs foolier IPad Poptabs big book	wednesday tall notebook tall Threat jar foot craze pinsol box tops

border by Tracee Orman, Fonts by KB Fonts

crazycrittercafe.blogspot.com





Measurement

Measure Me!

Unit of Measure: _____



Body Part	Estimation	Actual Measurement
Body		
Arms		
Hands		
Legs		
Feet		
Waist		

Weight and Balance



Through trial and error the two boys explore which two objects are of a similar weight – this also introduces children to the concept of “equal” (weight)

Weight: Using Non-standard Units



Child uses another way of weighing the fruits and making an estimate in the equivalent number of blocks.

Conservation of Weight



Child observes that despite the change in the shape of the dough, the weight remains constant

Weight: Determining Heaviest to Lightest



After weighing individual object, the child has to put the objects from the heaviest to the lightest

Which Weighs More?



Materials: balance scales, variety of objects to weigh

1. Choose two objects. Which object do you think weighs more?

I think the is heavier than the .



2. Use the balance scales to check your prediction.
3. Draw a picture to show what happens when you put the two objects on the balance scales.

4. Repeat using two different objects.



Capacity: Measuring Uncountable Units



Children gained personal experience with the different capacities of the varying sized containers.

Capacity: Measuring Uncountable Units



In this next set of slides, children graduate to experience smaller units of receptacles.

Capacity: Measuring Uncountable Units



As children experience both liquid and solid uncountable units to fill a receptacle, they form their own Logicomathematical understanding (cannot be taught but must be formed through personal experiences).

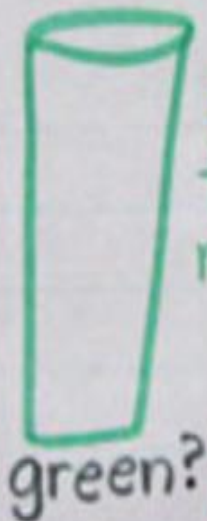
Estimation



After accumulating all these experiences, the child will put his understanding to a “test” by making an “educated” guess - estimate

Ms. Warner is really thirsty!

Which cup should she use? Why?



We think:

Not the blue - it's too small. The green is bigger than the red - it will hold more water.

We learned: The red is bigger than the green. It is shorter, but "fatter." so it holds more water.





How long is the shadow of your structure?

Make a guess and measure it.

Flip My Tower

It's a CN Tower. It has a look-out and a square shape and a door to go in. People have to climb the stairs to get to the top. Filip



Thank You



for your kind attention

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Interested in Children Development