Activity Idea

Activity	Water play

Possibilities for maths learning	☑ Counting	☐ Composition	☐ Cardinality
	☐ Subitise	☑ Comparison	☑ Measure
	☐ Shape	☐ Pattern	☐ Spatial awareness

Resources	➢ Water tray and/or paddling pool, hose pipe if required ➢ Variety of bottles, buckets, water toys, boats, floating and sinking objects ➢ Pebbles, shells, stones ➢ Measuring materials, including measuring jugs, cylinders and tape measure

Activity Outline	Introduce the children to the activity by talking about the water tray. If you have looked at floating and sinking before, recap on this. If not, introduce this in the activity. Make sure the children are dressed appropriately as they may get wet. Encourage children to look at and feel the objects available and decide whether they will float or sink. Ask them to explain their reasoning. Test out the theories and group the items according to properties such as heavy and light, float or sink – which group has the most in? Why do they think that? Count and check. Explore all of the different containers. Look at the shapes of the different containers, what shapes have we got? What do they remind children of? Wonder which one holds the least and which one holds the most? (Ask the children to put them in order so they can see them). Test this Challenge children to predict how many cups it will take to fill a bucket. Record predictions and test this out. Using squirty bottles, see how water can be squirted? What happens children press harder? What happens if they tip the bottle upwards slightly? What happens if they tip it down? Which angle is best for getting the water the furthest? Use rich mathematical language such as full, empty, half full, measure, biggest, smallest etc.

	Testi out theories: How many stones will it take to sink this boat? Estimate and test out. If we have already added two and we add one more how many would that be? If you swap stones for shells, do children think it will take the same amount to sink? Ask them to explain their thinking.

Extension Opportunities	✓ For children who are still emerging into this area of development you can support them to count, estimate and experiment to help build their understanding in this key area. ✓ For children who are exceeding in this area think about how to extend each idea further. For example, can you squirt the water this far and hit the square/circle/number 10.