

A Collaborative 3 ACT Task

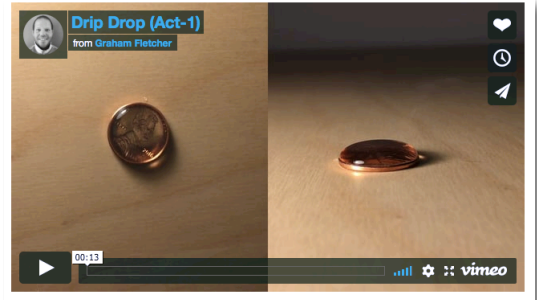
Title: Drip Drop

link: <https://gfletchy.com/drip-drop>

Big Idea: multiplying a whole number by a fraction

Curricular Competencies:

- *estimating reasonably*
- *developing mental math strategies and abilities to make sense of quantities*
- *visualizing to explore mathematical concepts*
- *developing and using multiple strategies to engage in problem solving*



ACT ONE:

Establishing a Need to Know: watch the 13 second clip. After viewing the short clip, invite students to consider:

What did you notice?	What do you wonder?

and jot down the ideas as students share their thinking...

Driving Question: How many drops of water will fit on a penny?

Estimating: invite students to think of a reasonable estimate for how many drops of water would be too few, and a reasonable estimate for how many drops of water would be too many to fit on a penny.

A too low estimate:	A too high estimate:

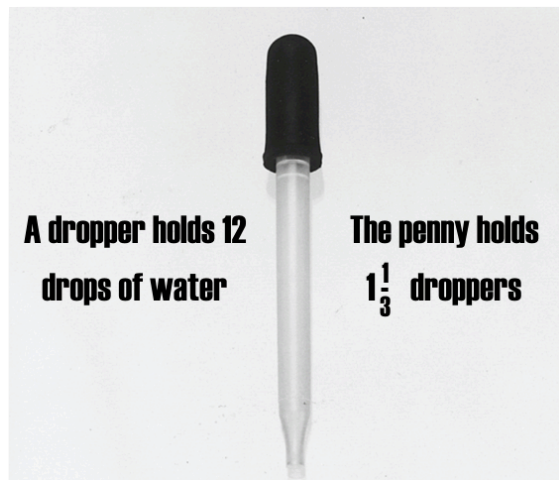
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ACT TWO:

What information would be helpful to know for solving this investigation?

Students will now work in visibly random teams of three to solve the investigation using one dry erase marker, one eraser and a large vertical non-permanent surface

Teacher role: Circulate and listen with purpose. Observe student collaboration; interactions, discussions. Are students building on or acknowledging each other's ideas? Observations will enable teachers to formulate questions that can target specific mathematical concepts *during* the learning process.



ACT THREE:

Share the 33 second clip that reveals the solution. Invite students to communicate their strategies for arriving at the solution for how many drops of water can fit on a penny.

Whole Group reflection:

Strengths: What worked (What strategies did you use to work toward a solution)?

Stretches: What was difficult?

Next steps: What would you do differently next time?