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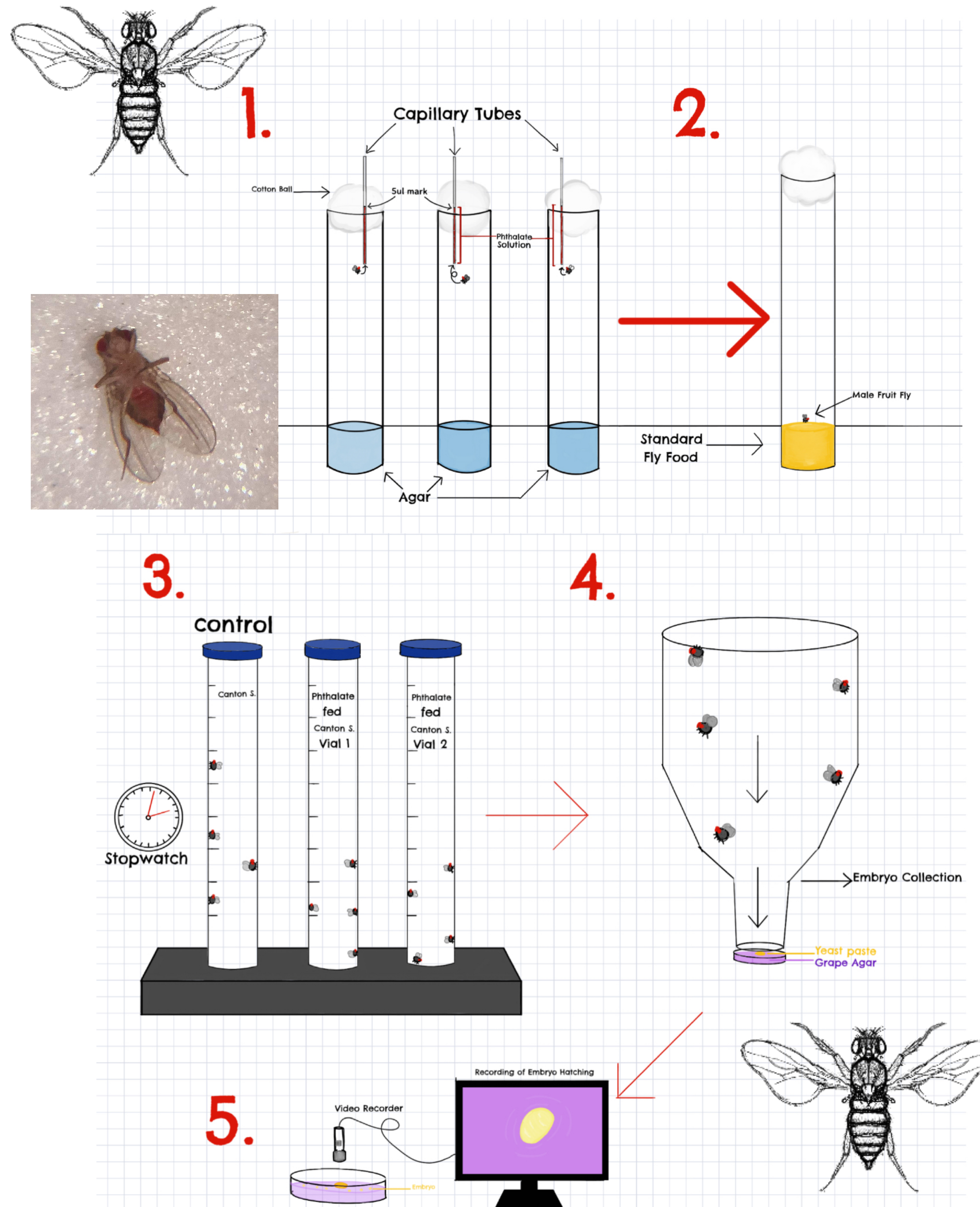
Background

- *Drosophila melanogaster*, **fruit fly**, is a model organism used to study **human health** related issues.
- **Pollution** is a growing concern, plastics specifically.
- Plastics are composed of **phthalates**.
- Used in nearly everything from shampoo to medical equipment to clothing.
- Looking to observe effects of **different concentrations of phthalates** on fruit flies by exposing them to phthalates through **capillary tube feeding**.

Future Directions

We hypothesize that the phthalate exposure will have a **negative effect** on the **physiology** of fruit flies. The assays listed above will be used to determine the effects of **exposure** on fruit flies.

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Methods

1. Using only male flies, 1 fly per vial, one capillary per vial each containing **5ul of 5% phthalates**, 95% ddH₂O. After the fly has been left in that vial for **24 hours**, the **amount left** in the capillary tube will be **measured** and that fly will undergo a series of tests.
2. A **life span** assay will be **conducted** to determine whether the **fly's life span** was **effected** in anyway due to the amount of the **phthalate** solution that fly had **consumed**.
3. A **climbing assay** will be performed in order to observe whether the fly's geo taxis has been **effected** by its phthalate consumption. Placed in an empty climbing vial, taping once on a table to ensure the flies have fallen to the bottom. Using a stopwatch to measure the **time** taken for the fly to **climb up**.
4. Changes in **Embryonic development** duration will be observed as well. By **gathering flies** into a large bottle, placing a grape agar plate with yeast paste to attract them to the bottom, **enticing** them to **lay eggs**.
5. The Petri dish **containing Embryos** will be taken and **recorded** in order to look for **changes** in the **duration** and **cycle** of **embryonic development**.

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