

Science 9 - Flower Dissection Worksheet

Name _____

Date _____

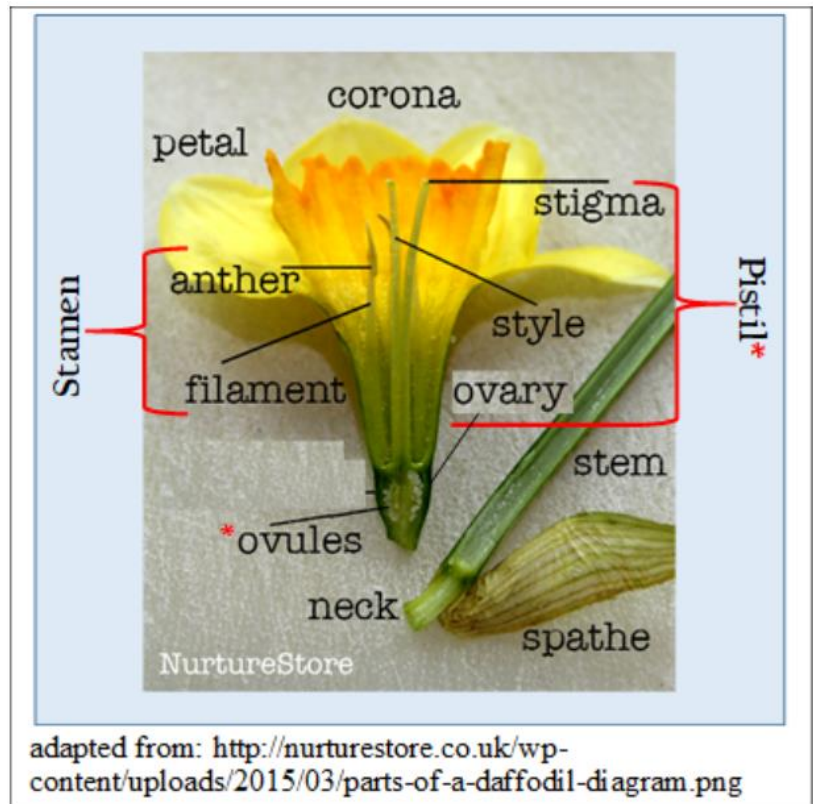
Introduction:

To go over before doing the lab. Also have BC Science 9 text open to pg 212-214 for further information.

If you want further information in a visual format go to youtube and search “Dr Bionics Flower Anatomy” or go to: www.youtube.com/watch?v=djPVgip_bdU (produced by Peekaboo Kids).

Every flower consists of a set of adaptations that help to ensure successful reproduction. For example, flowers often have bright colours, attractive shapes, and pleasing aromas. These traits help them attract insects and other animals that will carry **pollen** grains from flower to flower. Pollination also occurs by means other than animals carrying the pollen. For some flowering plants, the wind plays an important role in transferring pollen from plant to plant.

The flower of a plant produces the **seeds**, each of which contains a new plant **embryo**. The reproductive organs, the **stamens** and **pistils**, lie inside the petals. A stamen is a male reproductive part. It consists of an **anther** that is held up by a **filament**.



The anther produces pollen grains. A pistil is a female reproductive part. Its top is called the **stigma**. The stigma is sticky to ensure that when pollen grains land on it, they stick to it. The middle supporting structure is the **style**, and the large base is the **ovary**, where the **ovules** (eggs) are produced.

Objectives

In this lab you will be expected to:

1. Sketch parts of a flower, labeling all the parts.

Hypothesis:

If the structures and functions of the reproductive parts of the plant are identified then you can relate how they are similar or different to how reproduction in animals occurs.

Observations

Complete the following table.

Title: _____

Flower Part	Draw a diagram/picture	Description of function
Sepal		
Petal		
Stamen		
Pistil		

Analysis Questions:

Answer the following questions once you are done the Lab.

Sepal & Petal Questions

1. Do you think the Sepals are required for reproduction to work?
2. What advantage to the flower having colourful petals?
3. How are petals and sepals alike?
4. How are petals and sepals different?

Stamen Questions

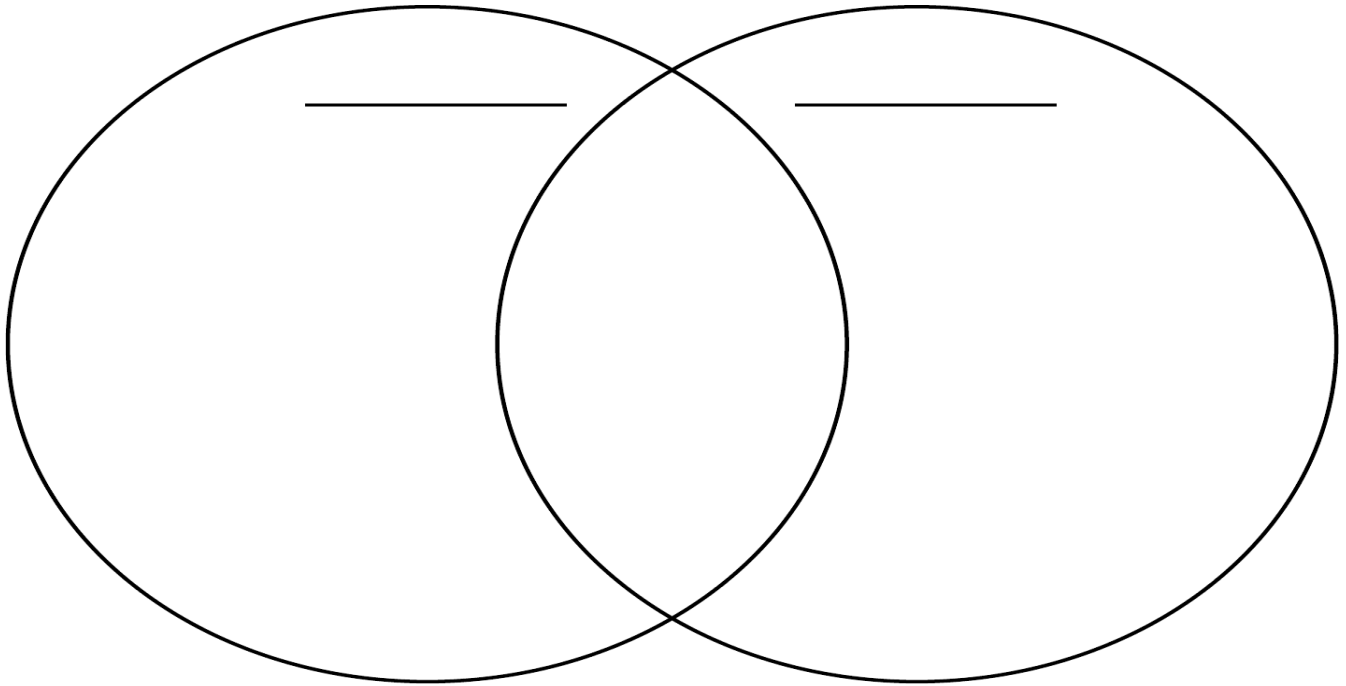
1. What do anthers produce?
2. Why do you think it is important to elevate the anthers?
3. How do you think a pollen grain can get to the stigma of a pistil?
4. Flowers usually contain more stamen than pistils. Why do you think this is?

Pistil Questions

1. Why is it important to elevate the stigma?
2. How does the structure of the stigma aid in pollination?
3. Which parts of the flower develop into the seeds?

Concluding activity:

Compare the plant reproduction system to internal fertilizing animals (info on BC Science 9, pg 210-211), to identify how it is **similar** and **different** to what you learned in this lab. Use a Venn Diagram, or a Table, or a Written Paragraph:



DON'T DO BOTH CHARTS! JUST CHOOSE ONE!