



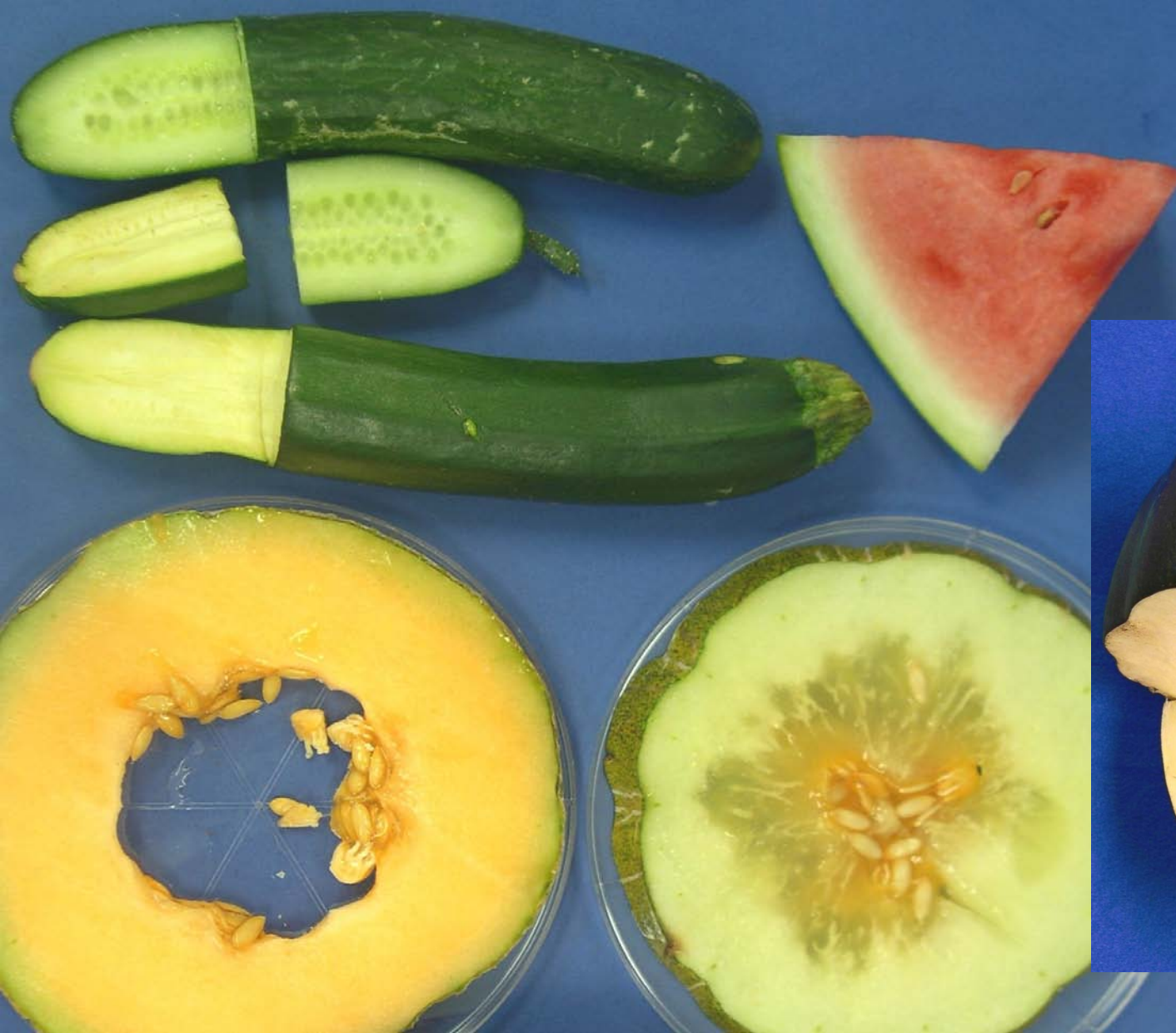
**1) Drupe: fruit usually with a fleshy mesocarp and a single seed enclosed in a hard stony endocarp or pit (e.g. plum). Notes: 1) walnut mesocarp is hard when ripe; 2) holly drupes have 4 – 6 pyrenes (seeds each in own hard endocarp).**



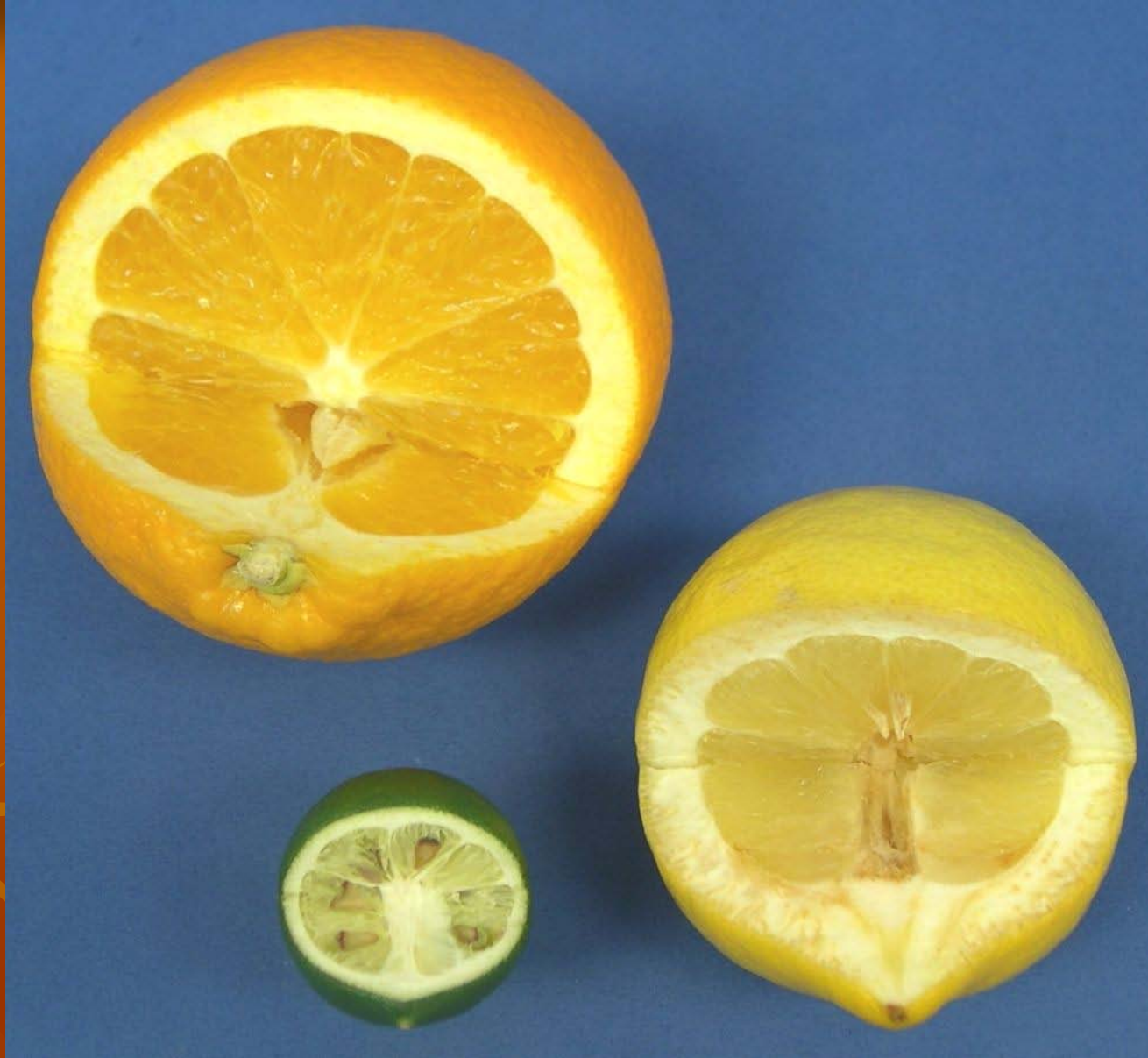
**2) True berry: fleshy fruit (mesocarp + endocarp) with thin skin (exocarp) and many seeds (e.g. grape)**



**3) Berry (tomato): pericarp (exocarp, mesocarp, endocarp), seed, locule, placenta**



**4) Pepo: a berry with a relatively thick rind (Cucurbitaceae, e.g. squash) which is derived from the receptacle (accessory tissue).**



**5) Hesperidium: a berry with leathery outer skin containing oils; carpels evident in cross section (Rutaceae e.g. lime)**



**6) Pome: fruit with leathery or papery endocarps surrounded by fleshy accessory tissue derived from the floral tube**



**7) Pome (apple): pedicel, calyx, accessory tissue (derived from the floral tube), pericarp (exocarp, mesocarp, endocarp), seed, locule**



**8) Rose hip: similar to pome except it contains many achenes (an aggregate fruit type)**



**9) Aggregate fruit: fruit divided from a single flower having several to many pistils (e.g. magnolia is an aggregate of one-seeded follicles; tulip tree of samaras)**



**10) Multiple fruit: derived from several to many separate flowers in an inflorescence, the fruit uniting to form a single fruit at maturity (e.g. fig)**



**11) Samara (key): indehiscent dry fruit with one or more wing (e.g. maple, ash, tree of heaven)**



**12) Nut: indehiscent dry fruit with a hard shell surrounding the seed (compound pistil but only one seed usually develops after the rest abort, e.g. hazelnut). Note: beech (top right) has 3-angled nuts from compound ovary enclosed in prickly bracts that split open like a capsule.**



**13) Grain (caryopsis): fruit wall fused to the seed coat (e.g. oats)**



**14) Achene: pericarp and seed loosely attached (e.g. sunflower)**



**15) Schizocarp: splits when ripe into two mericarps; carpels not dehiscent to release seeds (e.g. fennel)**



**16) Capsule: fruit with a compound pistil splitting along or between carpel lines splitting at a number of edges lengthwise (e.g. princess tree), or forming a cap that comes off or a row of pores that open near the top (e.g. poppy)**



**17) Capsule (lily): pericarp splits along carpel lines, seed, locule. Exception: poppy – seeds dispersed through pores**



**18) Silicle: Fruit less than twice longer than wide (e.g. dollar plant)**

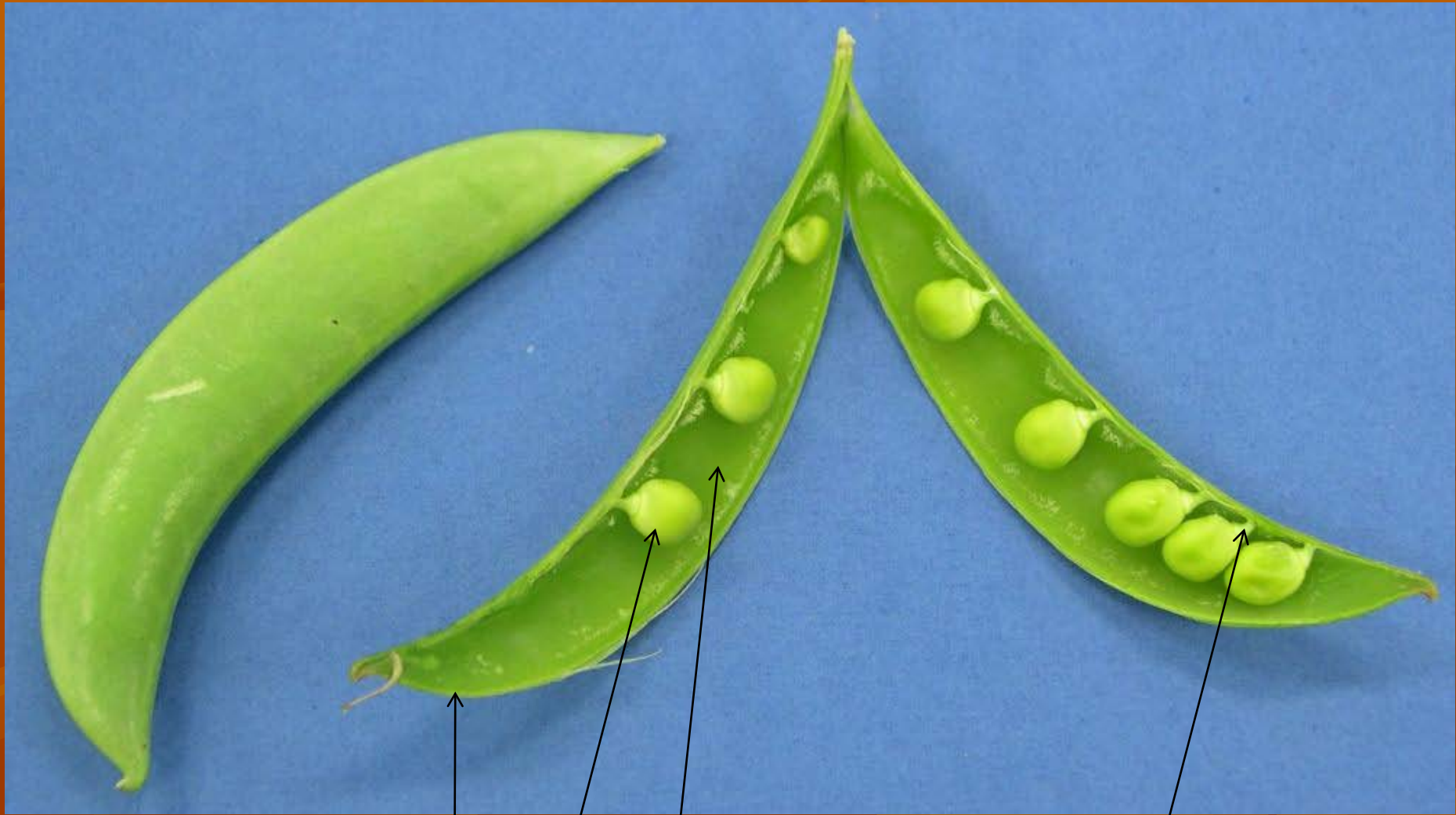
**Silique: Fruit more than twice longer than wide (Brassicaceae, e.g. stocks)**

**Note the central partition to which the seeds are attached (two compartments)**

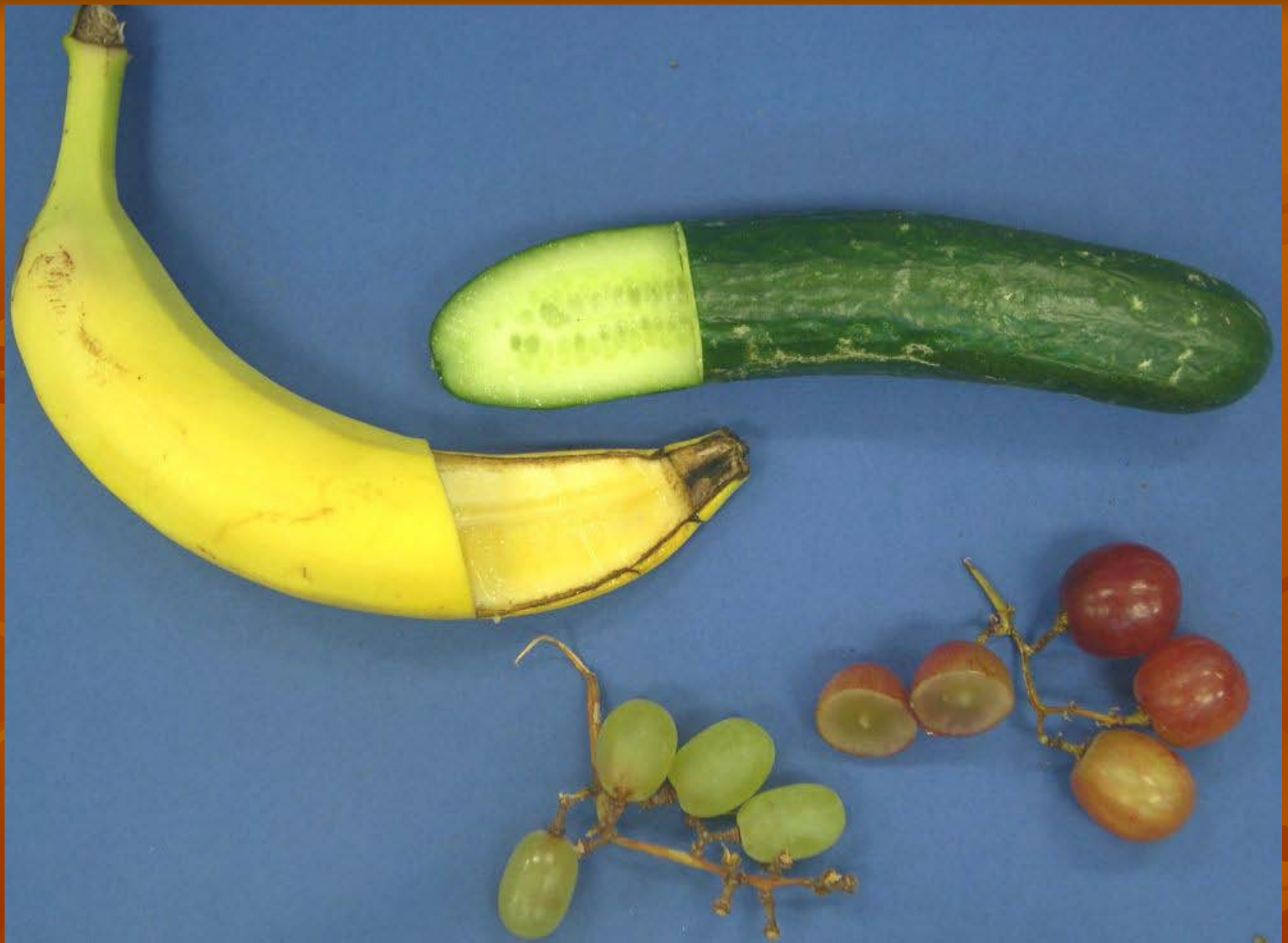


**19) Follicle: splitting along one edge only (e.g. milkweed)**





**21) Legume (pea) parts: pericarp, seed, locule (air space round seed), placenta**



**22) Parthenocarpic fruit examples (banana, long English cucumber, seedless grapes)**



**23) Compound (ovary had many carpels) versus simple pistil (orange versus kiwi).**

Use the Key to common Fruits to try and identify the fruit type when the caption is covered with paper.

Use [www.Kwantlen.ca/PlantDatabase](http://www.Kwantlen.ca/PlantDatabase)  
(Morphological Search > Fruit Type) to search plant examples for each fruit type.

## 24) Fruit identification practice