

STATION #1:

Examine the slides made from the reproductive structures of two different organisms.

Sample A

Thursday/Friday: Pine Pollen Cone l.s.

Sample B

Thursday: *Selaginella* – stro l.s.

Friday am/pm: *Lycopodium* – stro l.s.

Sample B

Thursday: *Selaginella* – stro l.s.

Friday am/pm: *Equisetum* – stro l.s.

STATION #1

2 Compound

STATION #2:

Three of the plant clades we have studied are represented here. Observe the plants, then answer the questions.

MATERIALS:

	<i>Thursday</i>	<i>Friday am</i>	<i>Friday pm</i>
2A	<i>Psilotum</i>	<i>Psilotum</i>	<i>Psilotum</i>
2B	Flowers with obvious stamens and pistils - Oregon grape	Flowers with obvious stamens and pistils - Oregon grape	Flowers with obvious stamens and pistils - Oregon grape
2C	Seed cone of conifer	Pollen cone of conifer	Pollen cone of conifer

STATION #2

1 Dissecting
probes/forceps
dish for scope

STATION #3:

Examine the three plants at this station. If you wish you can examine portions of them with the dissecting scope.

MATERIALS:

Thursday:

Slide A = Pine Seed/Embryo

Slide B = Corn Seed l.s.

SLIDES A AND B ON WHITE CARD ON DISSECTION
SCOPES

Friday:

Slide A = Monocot Flower Bud x.s.

Slide B = Pine Seed Cone

Sample C = Pear

SLIDES B ON WHITE CARD ON DISSECTION SCOPE

STATION #3

2 Dissecting

[FRIDAY: 1 Compound, 1 Dissecting]

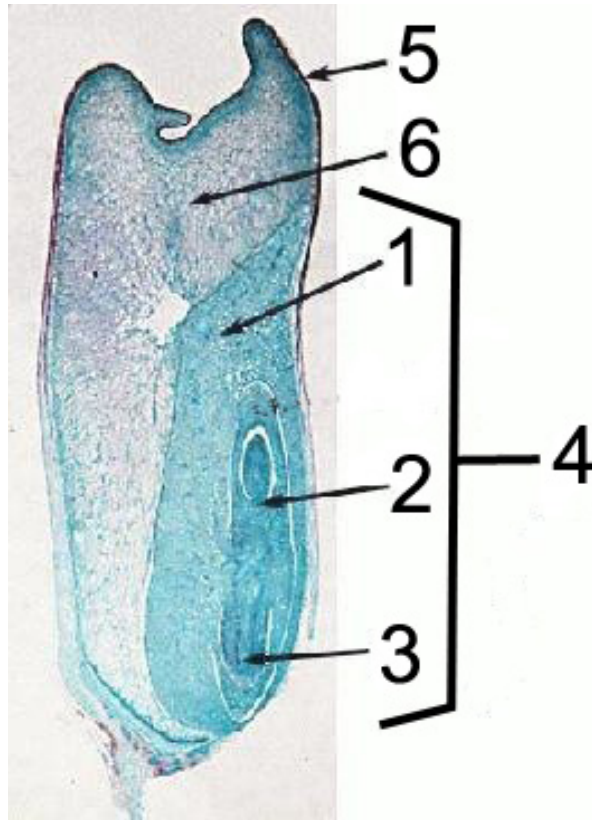
STATION #3 (Thursday): Look at SLIDES "A" and "B".

SLIDE A:

Examine the slide and do as instructed.

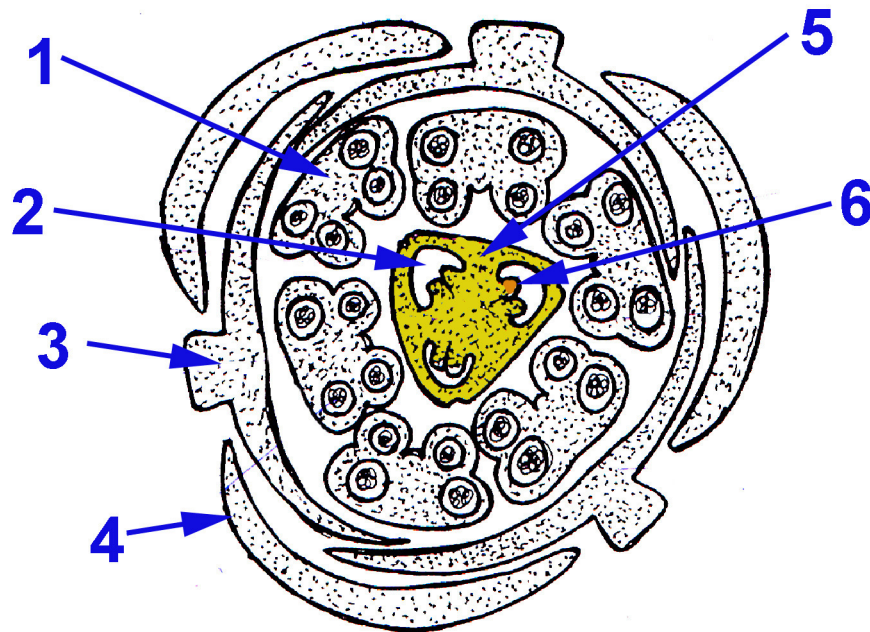
SLIDE B:

Examine the slide



STATION #3 (Friday): Look at SLIDES "A" and "B"

SLIDE A:



Note: 5 refers to the structure coloured yellow in the figure

SLIDE B: This section was made of a reproductive structure prior to pollination.

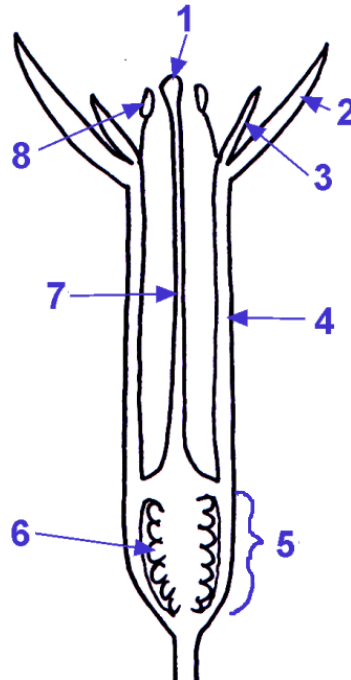
Use the following list of terms to label the diagram of **Slide B** on your worksheet. Incorrect labels will be penalized.

LIST OF TERMS TO LABEL DIAGRAMS WITH:

- | | |
|-----------------|----------------------|
| archegonium | microsporangium |
| bract | microsporophyll |
| endosperm | nucellus |
| fruit | ovary wall |
| integument | ovule |
| megagametophyte | ovuliferous scale |
| megasporangium | pollen |
| megasporophyll | root apical meristem |
| micropyle | seed coat |

STATION #4

PART A Longitudinal section through the flower of Plant A:



PART B Examine the preparation of Plant B. Answer the questions.

MATERIALS: **PART A** Thursday *Ribes* flowers
Friday am: *Ribes* flowers
Friday pm: *Peiris*

PART B Thursday: Cantaloup
Friday am: *Pteridium* rhizome x.s.
Friday pm: *Pteridium* rhizome x.s.

STATION #4

1 Dissecting

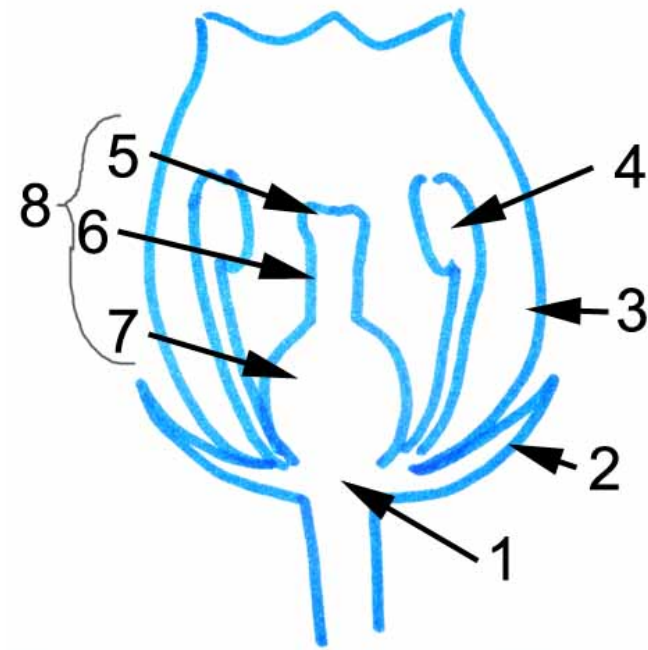
- Tray with probes
and forceps

Friday pm:

add compound

STATION #4

**PART A Longitudinal section through the flower of
Plant A:**



**PART B Examine the preparation of Plant B. Answer
the questions.**

STATION #5:

Examine Plants A, B, and C. There are two microscope slides at the station which may or may not have been made from one of the plants.

MATERIALS:

	<i>Thursday</i>	<i>Friday am</i>	<i>Friday pm</i>
5A	Fern	Fern	<i>Selaginella</i>
5B	<i>Equisetum</i>	<i>Equisetum</i>	<i>Equisetum</i>
5C	<i>Lycopodium</i>	<i>Lycopodium</i>	<i>Lycopodium</i>
5 - 1	<i>Pteridium</i> - rhiz. x.s.	<i>Equisetum</i> - stem x.s.	<i>Selaginella</i> – stro. l.s.
5 - 2	<i>Lycopodium</i> - stem. x.s.	<i>Lycopodium</i> - stem. x.s.	<i>Lycopodium</i> – stro. l.s.

STATION #5

2 Compounds

ON BOARD

Map

Taxa:

Lycopodiaceae

Selaginellaceae

Equisetaceae

Psilotaceae

Ophioglossaceae

Leptosporangiate ferns

Coniferophytes

Angiosperms