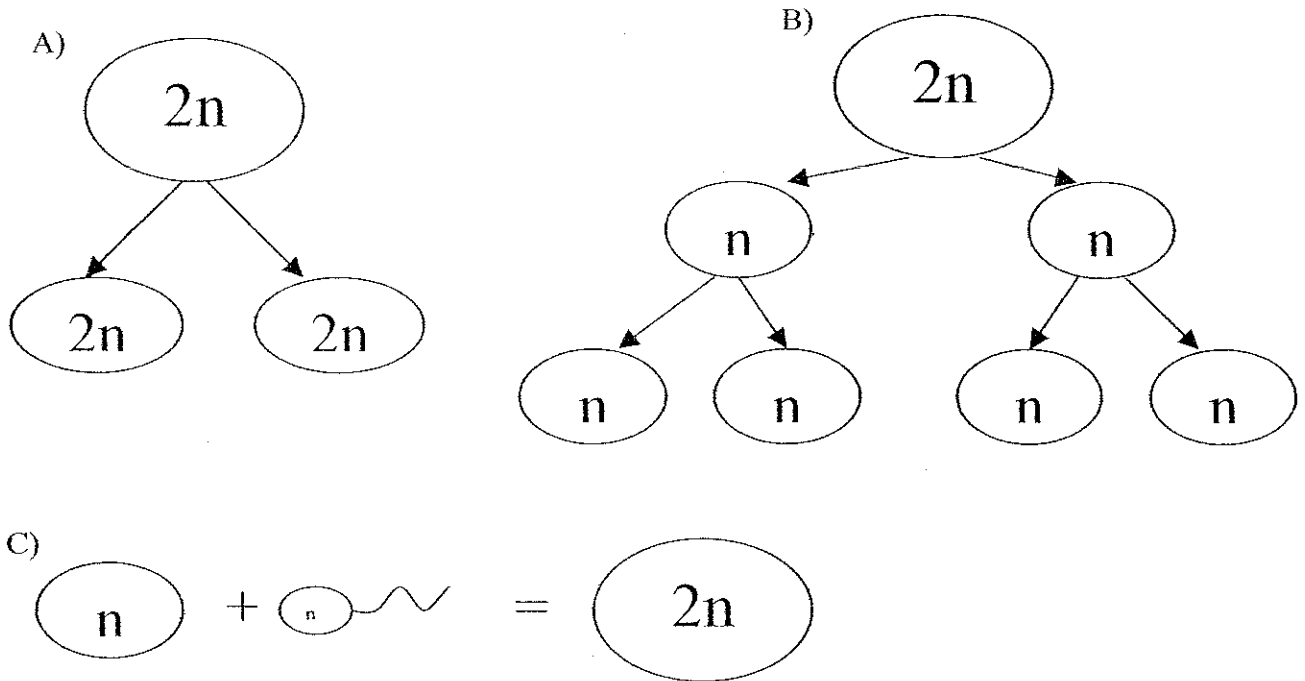


Science 9 – Reproduction

Sexual Reproduction Review

Name: _____ Block: _____



1. What process is shown in each diagram above?

- a)
- b)
- c)

2. What type of cell is created by each process above? What is created?

- a)
- b)
- c)

3. How is sexual reproduction different from asexual reproduction?

over 

4. Complete the following chart about the types of reproduction:

	Advantage	Disadvantage
Asexual		
Sexual		

5. Which type of reproduction (sexual or asexual) allows organisms to have greater adaptability? Why?

6. What are somatic cells and gametes? How is their genetic material different?

7. Which process creates somatic cells? Which process creates gametes?

8. Which gamete is female and which gamete is male?

9. Explain how meiosis and mitosis are different in terms of the number of daughter cells created and the number of chromosomes in each cell?

Section 3.3- Methods of Sexual Reproduction

Use pages 83-86 in Science Probe 9 to answer the following questions in point form:

PAGE 83

1. Describe conjugation.
2. What are two organisms that reproduce by conjugation?
3. Describe conjugation in E. coli bacteria
4. In the space below copy figure 1 on page 83. Copy all labels and colour it.

5. Why does an organism that's attached to one location become a hermaphrodite?

6. What is a hermaphrodite?

PAGE 84

7. Are earthworms hermaphrodites?
8. Can an earthworm fertilize it's own eggs?
9. How do earthworms reproduce?

10. Where does fertilization occur in an earthworm?
11. What are two examples of aquatic (live in water) hermaphrodites?
12. Why do these aquatic hermaphrodites produce eggs and sperm at different times?
13. Describe how sponges reproduce (2 things).
14. What are baby sponges called?
15. What do baby sponges do after they are released into the water? (2 things)
16. Describe how barnacles reproduce. (2 things)

PAGE 85

17. Are most flowers hermaphrodites?
18. What is the male reproductive structure called?
19. What are the two parts of the stamen? What does each part do?
20. Where are the male gametes found?
21. What is the female reproductive structure called?
22. What are the three parts of the pistil?

30. Where are the sperm located in flowering plants?

31. What is pollination?

32. What are 4 ways that pollen grains can be moved from the male to the female part of the flower?

33. What's it called when a flower pollinates itself?

34. Where does the zygote develop into a seed?

PAGE 86

35. Give 2 examples of plants that have separate male and female reproductive structures.

36. What are the two methods of fertilization in animals that have separate sexes?

37. Describe sex between salmon. (2 things)

38. Why is salmon reproduction referred to as external fertilization?

39. Describe the external fertilization process in coral reefs (2 things).

40. In internal _____ the sperm must be deposited _____ the body of the female.

41. Give 2 examples of organisms that use internal fertilization.

23. What does the stigma do?

24. Where are the eggs contained?

25. What are flower petals?

26. What is the purpose of flower petals?

27. What are sepals?

28. What is the purpose of sepals?

29. In the space below copy figure 4 on page 85. Copy all labels and colour your drawing.

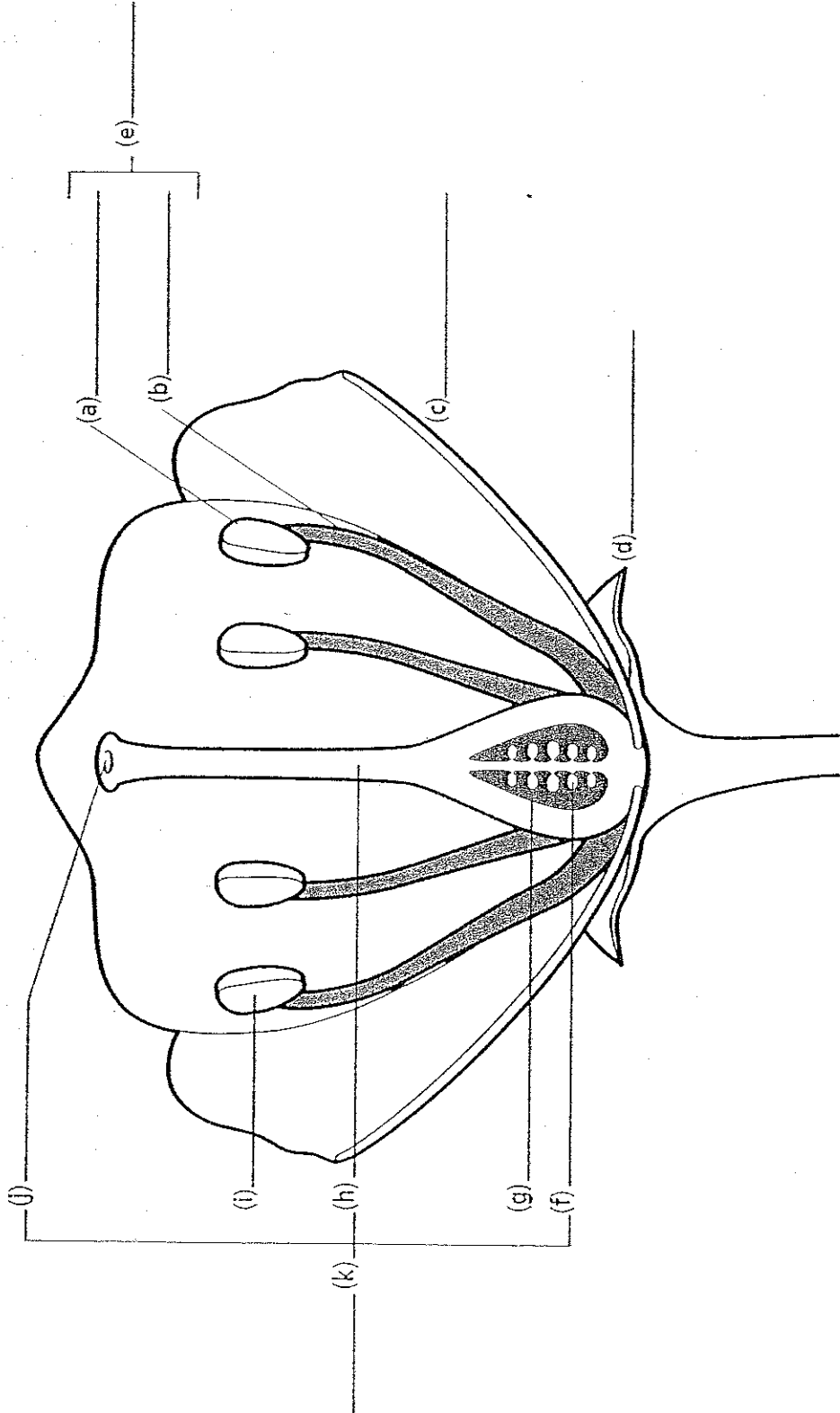
over 

Name: _____

Date: _____

Anatomy of a Flower

Label the following parts of a flower and include a brief description of the function of each structure.



Section 3.5

Name: _____

Date: _____

Block: _____

-Chart-Reproductive Technologies in Agriculture

Use pages 93-96 in Science Probe 9 to fill in the following chart in point form:

Technology	Student descriptors (three)
Selective Breeding (page 93)	1) _____ 2) _____ 3) _____
2. Artificial Vegetative Reproduction (use page 93-94)	1) _____ 2) _____ 3) _____
3. Artificial Insemination and In Vitro fertilization (use page 94)	1) _____ 2) _____ 3) _____
4. Hatcheries (use top of page 95)	1) _____ 2) _____ 3) _____
5. Recombinant DNA (use page 95)	1) _____ 2) _____ 3) _____
6. Genetic Engineering in Agriculture (use page 96)	1) _____ 2) _____ 3) _____

W.S. #1

Science 9

4.7 Reproductive Technologies

Name _____

Date _____

Read p 134 -135 and answer the following questions

1. What are three possible reasons a couple is unable to have a baby?
2. What is the purpose of a fertility drug?
3. What happens when a woman takes fertility drugs? What may happen as a result?
4. What is artificial insemination?
5. How can artificial insemination help overcome a low sperm count?
6. What is intrauterine insemination? How is it different from artificial insemination?
7. Why is sperm placed high in the uterus?
8. What does GIFT stand for? What is GIFT?
9. What does IVF stand for? What is IVF?
10. What is the term used for IVF babies?

over ↗

11. Describe the process of IVF

12. What is a surrogate mother?

13. What does ICSI stand for? What is ICSI?

14. What are two reasons for using ICSI instead of IVF?

4.7-Chart-Reproductive Technologies (in Humans)

Use pages 134-135 in Science Probe 9 to fill in the following chart in point form:

Technology	Student descriptors (three)
Fertility Drugs (page 134)	1) _____ 2) _____ 3) _____
2. Artificial Insemination (use page 134)	1) _____ 2) _____ 3) _____
3. Intrauterine Insemination (use page 134)	1) _____ 2) _____ 3) _____
4. Gamete Intrafallopian Transfer (use top of page 135)	1) _____ 2) _____ 3) _____
5. In Vitro Fertilization (use page 135)	1) _____ 2) _____ 3) _____
6. Intracytoplasmic Sperm Injection (use page 135)	1) _____ 2) _____ 3) _____