

Review Chap 7 228 - 229
2,3,4,5,6,9,10,11,12

Review Ch 8 256 - 257
2,3,6,7,9,14,15

Unit review 260 - 261

1 a- d, f-g

2. b, f, g, h, i, j

3

4

5

6

20. _____ syndrome is a nondisjunction disorder in which there is one X chromosome

Cell parts

Mitosis

types of asexual reproduction

6.1 DNA & DNA fingerprinting

6.2 Cancer

6.9 Cloning p 194

7.1 Reprod. Strat. 202

7.2 Meiosis 206

7.9 Atypical meiosis 222

8.1 Survival strategies 232

8.5 Conception & Preg.242

8.6 Reprod Tech. 244

8.7/8.8 Human Embryo 248/250

8.10 Birth 254

Review Chap 7

2,3,4,5,6,9,10,11,12

2. In the summer aphids reproduce asexually by giving birth to female aphid that carry eggs, basically making clones during the summer. In the fall some females become males allowing for mating of males and females thus sexual reproduction taking place.

3. Sexual reproduction allows for combining of different genetic information, thus new combinations of genes can produce new traits.

4. a) asexual b)sexual c)sexual d)asexual

5. Each parent has 2 homologous chromosomes that code for hair color, sex cells carry only 1 of these homologous chromosomes. With fertilization 1 from each parent combines to form offspring which can have different gene combinations. Ex. Brother -Gene A from Father Gene C from mother sister Gene A from father gene D from mother thus different combinations.

6. Meiosis

4 cells

haploid cells

sex cells

two stages

Mitosis

clones of mother

skin cell

9. See Fig 1 page 222 - sex cell from nondisjunction must have had an extra #21 chromosome.

10. a) female A b) 9,8,7 c) fertilization d)zygote E

11. a) 23 b) meiosis reduces from 46 to 23 c) 46

12. a)stage 2 b)fertilization c) mitosis d)23 pairs

Review Ch 8

2,3,6,7,9,14,15

2.a) spore - bacteria(anthrax) , fungi

b) seed - fruit, trees(pine)

c) eggs - fish, birds

d) zygotes - marsupials & placentals

3. Seeds come with packaged food, spores do not they have to wait for favorable conditions.

6. a) uterus b) endometrium c) corpus luteum d) ovary

7. Egg released from ovary into oviduct , cilia move egg through tube, fertilization takes places in tube, cilia keeps sweeping egg or zygote along to uterus, if just egg, period occurs, if zygote it will implant in endometrium, no period occurs.

9. albumen - protein (egg white)

air space - air reservoir

Yolk - contains nutrient fats & proteins

Shell - hard but permeable to gases & chemicals

P240

14. In vitro has the fertilization process take place in a petri dish whereas normal reproduction fertilization takes place in oviduct. In vitro embryo(s) is inserted in uterus in hopes of implantation in endometrium, normal zygote makes its way to uterus and hopefully implants in endometrium.

15.a) Spores can remain dormant in environment for long periods of time and grow when conditions become favorable.

b) six strongest make it to the nipple, and then the milk supply would be necessary for only 6 instead of 8

c) Only the fittest will survive

d) killing the other will allow the one that lives to get all the food and care, increasing its chance of survival

f) Most of the eggs will die on the ground, but by producing a lot it ensures some will survive

Unit Review

1. a) metaphase
b) interphase
c) meiosis
d) mitosis - (binary fission)
f) mutation
g) hermaphroditic
h) conjugation
i) placenta

2. b) true
f) false
g) false
h) true
i) false — same amount of chromosomes
j) false — only 1 sperm

3. d) produce sex cells
4. c) 23 chromosomes
5. c) 24 chromosomes
6. d) ovary