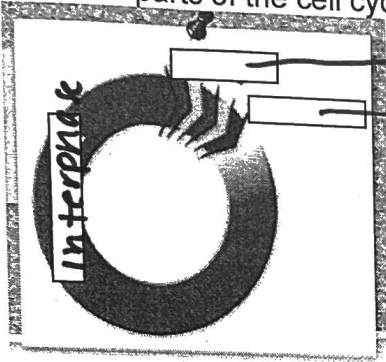


Reproduction – use the word bank for

★ Words will be used more than once

Interphase	Mitosis	Cytokinesis	Prophase	Metaphase
Anaphase	Telophase	Skin (body) cell	Sex cell	Reproduction
Growth	Repair	Replacement	Body cell	23
46	2	4	Haploid	diploid

1. Label the parts of the cell cycle diagram:



Mitosis
Cytokinesis

2. List the 3 stages of the cell cycle in order interphase mitosis
cytokinesis (not the stages of mitosis)

3. Why does cell division take place in single celled organism reproduction

4. Skin/body cell Which type of cells are formed in mitosis

5. interphase In which stage of the cell cycle does DNA replication occur _____

6. prophase Which phase of mitosis takes place first

7. You are looking at a cell under a microscope, you see 2 nuclei – which phase is it? tetraphase

8. You are looking at a cell under a microscope, there are no chromosomes visible, just a tangled ball of string, which stage is it interphase

9. You are looking at a cell under a microscope, in which stage would you first see chromosomes prophase

10. Which kind of cell is formed from mitosis? body cell

11. A cell with 2 types of each chromosome diploid

12. Sex cells have the 1/2 number of chromosomes. -haploid

13. After meiosis in a human, how many sex cells are formed? 4 how many skip-repeat chromosomes do the sex cells have? 23

14. How many cells are formed in meiosis 4 ?

15. How many chromosomes does a human cell that has finished meiosis have? 23

16. If an organism has 8 chromosomes in its body cell, how many would be in its sex cells

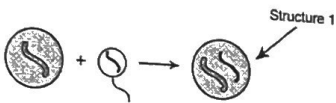
4

17. Name the process (mitosis or meiosis) that produces:

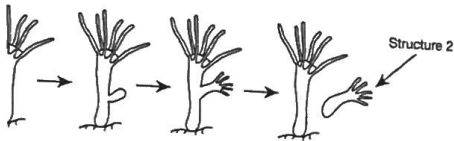
- Sex cells meiosis
- Skin cells mitosis
- Egg meiosis
- Sperm meiosis
- A new amoeba mitosis (Binary fission)
-

18. If an organism has 10 chromosomes in its cells - How many did it get from each parent? 5

19. Why do the sex cells of an organism contain $\frac{1}{2}$ the number of chromosomes as the organism's body cells? So that when they combine in fertilization they get the full amount



20. What kind of reproduction formed structure 1
Sexual (asexual or sexual)

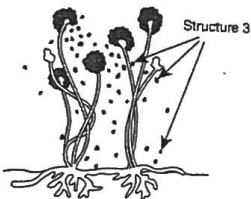


21. What type of reproduction formed structure 2
asexual (asexual or sexual)

22. Where did the genetic material in structure 1 come from? From the parent cells - egg + sperm

23. What type of asexual reproduction produces structure 2
budding

24. What type of asexual of reproduction produces structure 3? Spores



25. What kind of asexual reproduction happens when a parent organism splits equally to form 2 new offspring organisms fragmentation or regeneration

26. Mrs. Brown said the 2 plants in her classroom are identical. What does she mean
Same genetic material → formed thru mitosis → vegetative reproduction

27. List 4 types of asexual reproduction

- binary fission
- budding
- vegetative reproduction
- fragmentation
- regeneration
- spores

Some organisms can reproduce sexually and asexually:

28. Name 3 advantages of sexual reproduction

- genetic variation
- organisms can resist disease
- They can survive in a changing environment

29. Name 3 advantages of asexual reproduction

- fast
- no mate needed

The organisms below are reproducing. Which organisms will NOT have genetic variation (circle):

Dog, human, hydra, amoeba, tree, potato formed from a tuber

↳ if growing from roots it will not have variation
↳ normally grows from a seed - then it will