

**1.** What kind of cell organelle is this?

**Correct Answer:**Mitochondrion

**2.** Which organelle would NOT be found in animal cells?

**Correct Answer:**chloroplast

**3.** Which of the following statements is not part of the cell theory?

**Correct Answer:**Only animal cells are composed of cells.

**4.** The basic unit of structure and function in a living things.

**Correct Answer:**cell

**5.** What organelle is considered to be the “gatekeeper” for all cells and allows materials in and out of the cell?

**Correct Answer:**Cell Membrane

**6.** What organelle releases energy for a cell?

**Correct Answer:**Mitochondria



**7.** B = brown fur  b = white fur
In the punnett square, what is the probability for white fur?

**Correct Answer:**50%

**8.** This thin layer protects the cell and regulates what substances enter and leave the cell.

**Correct Answer:**cell membrane

**9.** What cell part is NOT found in all cells?

**Correct Answer:**Cell Wall

**10.** The second part of Cell Theory states: "All living things are made up of cells."

**Correct Answer:**True

**11.** In mitosis, the two resulting cells are

**Correct Answer:**identical to the starting cell and identical to each other.

**12.** Why do we need meiosis?

**Correct Answer:**To halve the number of chromosomes going into sex cells

**13.** A gel-like fluid in which many different organelles are found.

**Correct Answer:**cytoplasm



**14.** Name structure #6.

**Correct Answer:**Golgi body

**15.** Every cell in every living thing comes from another cell that

**Correct Answer:**divides

**16.** In what organelle is the genetic material DNA found inside?

**Correct Answer:**Nucleus

**17.** Plant cells have what 2  organelles that animal cells do not have?

**Correct Answer:**cell wall and chloroplast

**18.** In plants, tall (T) is dominant to short (t). Perform the following cross: Tt x Tt. What is the probability of producing a short plant?

**Correct Answer:**25%

**19.** Fruit fly body cells have 8 chromosomes. After mitosis, you would expect a resulting fruit fly daughter cell to have ...

**Correct Answer:**8 chromosomes.

**20.** Crossing over helps promote

**Correct Answer:**genetic variation

**21.** the arrangement of parts in an organism

**Correct Answer:**structure

**22.** The scientific study of genes being passed by generation.

**Correct Answer:**Genetics



**23.** T - tall and t = short
In the punnett square below, what belongs in the missing square

**Correct Answer:**tt

**24.** The passing of genetic traits from parent to offspring:

**Correct Answer:**heredity

**25.** This sac with the cytoplasm stores water, food, waste, products and other materials.

**Correct Answer:**vacuole

**26.** who created the idea of the cell

**Correct Answer: Robert** Hooke



**27.** Name structure #5.

**Correct Answer:**rough ER

**28.** Membrane bound sacs that are filled with fluid, they store water, food, and waste

**Correct Answer:**Vacuoles

**29.** G = green, g = yellow
The genotype for a yellow plant is...

**Correct Answer:**gg

**30.** What organelle surrounds and supports plant cells?
**Correct Answer:**Cell Wall

**31.** Why is DNA important?

**Correct Answer:**it serves as the blueprint for traits of all living things

**32.** What do all living organisms contain?

**Correct Answer:**cells

**33.** What is another reason we need meiosis?

**Correct Answer:**So the offspring has genes from both parents

**34.** Rocks are not living because

**Correct Answer:**they are not made of cells

**35.** These small structures function as factories to produce proteins.

**Correct Answer:**ribosomes



**36.** Name structure #1.

**Correct Answer:**nucleus

**37.** Two mice heterozygous for red eyes mate. What is the expected genotypic ratio of their offspring?

**Correct Answer:**1 RR: 2 Rr: 1 rr

**38.** The site of photosynthesis

**Correct Answer:**chloroplast

**39.** What makes an adult squirrel bigger than a baby squirrel?

**Correct Answer:**More cells

**40.** Which organelle makes proteins?

**Correct Answer:**ribosomes

**41.** Who is considered the "father of genetics"?

**Correct Answer:**Gregor Mendel

**42.** A human usually has xx amount of chromosomes.

**Correct Answer:**46



**43.** Name structure #9.

**Correct Answer:**mitochondria

**44.** The process by which the nucleus is divided equally between two new cells

**Correct Answer:**mitosis

**45.** Which 2 organelles are in plants and animals?

**Correct Answer:**cell membrane and cytoplasm

**46.** Two brown eyed parents (Bb) have a baby. What is the chance the baby is blue eyed?

**Correct Answer:**25%