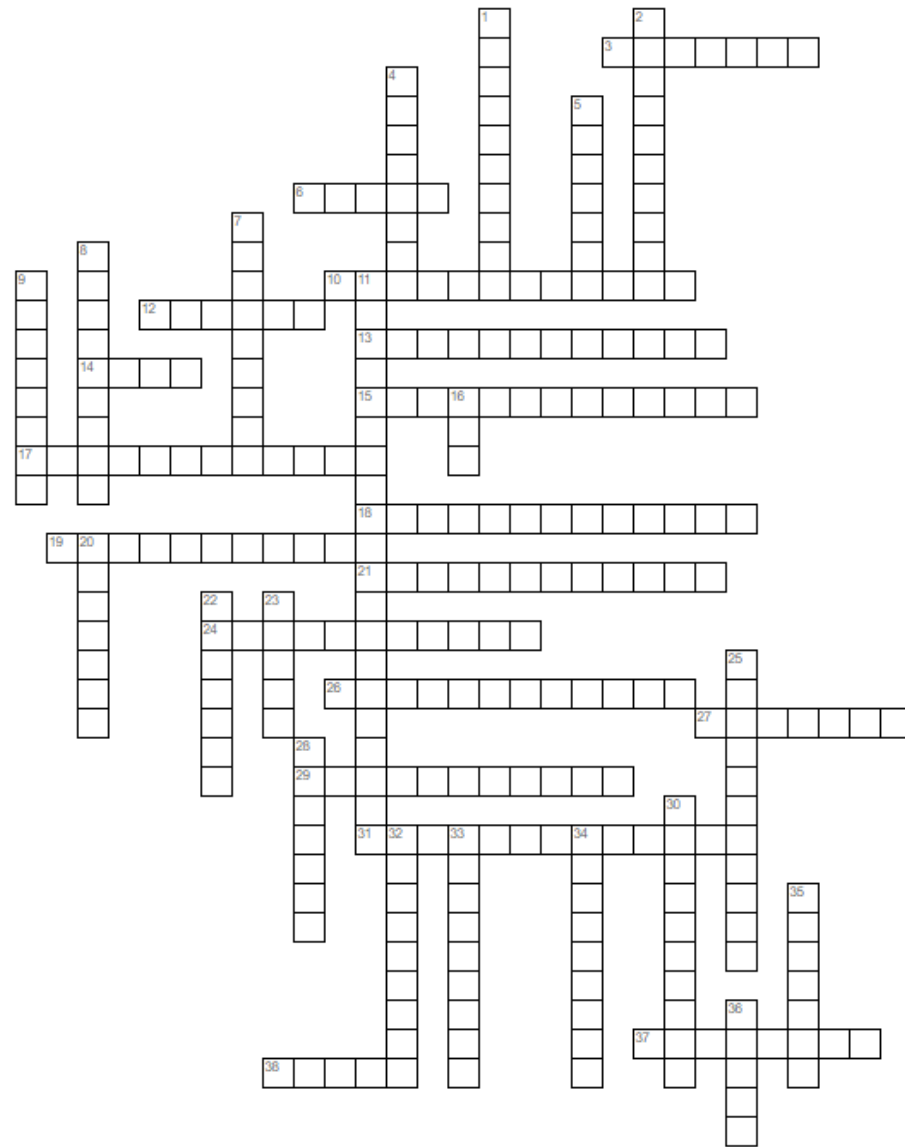


Biology 2201

Chapter 3 Review

**Across**

- 3 small container made of membrane used for storage and transport in the cell
- 6 observes that cells from many diverse organisms all appear to have a darker region, which he names the nucleus, near the centre.
- 10 a phospholipid bilayer that encloses the cell's contents, separating and

Down

- 1 cells lack a true nucleus.
- 2 refers to the ability of the microscope to show details at a given magnification. An image with good resolution has sharp, easily distinguished details. An image with poor resolution looks blurry.
- 4 a strong, rigid structure that surrounds the cell membrane in plant cells; made mainly of cellulose
- 5 is credited with disproving abiogenesis and proving biogenesis.

- protecting the cell from its surroundings
- 12 renamed spontaneous generation to abiogenesis.
- 13 the visual range that is in focus from foreground to background
- 14 To test this hypothesis, he placed rotting meat in two uncovered jars (his control group) and two jars that he covered with cloth (his experimental group).
- 15 a change in thinking that provided a whole new way of looking at the world.
- 17 organelle that is the site of cellular respiration, producing ATP for cellular functions
- 18 a large molecule
- 19 did needhams experiment over and said that vital principal was in the air
- 21 biomolecule containing carbon, hydrogen, and oxygen; includes sugars
- 24 the idea that life can develop from non-living matter; also called spontaneous generation
- 26 The study of the activity and properties of molecules that are important in cells and other biological systems
- 27 boiled broth but didnt boil it long enough and micro organism grew in the flask
- 29 organelle of plants and eukaryotic protists in which photosynthesis takes place
- 31 refers to the number of times larger the image you observe is compared with the actual object.
- 37 small non-membrane-bounded organelle that builds proteins.
- 38 used a simple microscope of his own design to look at cork. He called the little boxes or units that he observed cells.
- 7 said All plants are made of cells
- 8 The have a true nucleus.
- 9 organelle that contains enzymes that digest macromolecules (proteins, polysaccharides, fats, and nucleic acids)
- 11 an organelle that consists of the smooth ER, involved in production of lipids and steroids, and rough ER, involved in protein production and packaging
- 16 is an energy-carrying molecule that releases energy when it loses a phosphate.
- 20 control what enters and leaves a cell, carry oxygen in blood, aid in blood clotting, build hair and fingernails, support the body's tissues, break apart food molecules, allow muscles to contract, help cells to communicate, defend the body against ger
- 22 organelle that acts as a storage compartment; in plant cells, they are very large and have multiple functions
- 23 are a diverse group of macromolecules with one property in common: they do not dissolve in water.
- 25 designs his own single-lens microscopes. Some of his microscopes are as much as six times more powerful than compound microscopes of the time. He created much better glass lenses.
- 28 said All animals are made of cells
- 30 the idea that life only arises from life
- 32 "The Father of Biology" wrote that living organisms could arise spontaneously from non-living matter. He called this spontaneous generation.
- 33 non-membrane-bounded structure that produces ribosomes
- 34 a cell's contents, including the cytosol and organelles other than the Nucleus
- 35 said , "Cells are the last link in a great chain (that forms) tissues, organs, systems, and individuals...Where a cell exists, there must have been a pre-existing cell'
- 36 an organelle that processes proteins made by the ER and packages them for transport

Mr. Gillam

Holy Heart

Name: _____