

Name: _____

Due Date: _____

Your task:

Demonstrate your understanding of the relationship between electronegativity, bonding, and the polarity of molecules. Reference the text notes (pgs. 4-12) posted on the course website, as well as other credible Internet or print resources. Be sure to properly reference information sources (e.g., *Textbook: Biology 12, Blake et al., McGraw-Hill Ryerson, 2002.*) **Remember:** this task is meant to demonstrate your own thinking and understanding of these concepts. Do not plagiarize the ideas or work of others. Refer to your course syllabus or get clarification from your teacher regarding proper citation.

Success Criteria:

1. Incorporate, at least, the following key scientific terms in your product:

Electron(s)	Atom(s)	Protons	Neutrons
Molecule(s)	Valence shell or valence electron	Covalent bond	Ionic bond
Cation	Anion	Electronegativity	Non-polar covalent bond
Polar covalent bond	Hydrogen bond	Polar molecule	Reactivity or reactive
Hydrophilic	Hydrophobic	Soluble	Insoluble

2. Include examples and/or diagrams where appropriate.
3. Ensure that your product is self-explanatory (e.g., provide explanations to visual elements or models where appropriate). You should have at least a written component to communicate your understanding.
4. References (APA format; see example above).

Choose a mode to express your understanding:

LOGICAL-MATHEMATICAL Create a flow chart, or matrix	Be sure to study the criteria carefully before you select and as you proceed.	BODILY-KINESTHETIC Construct a model, or representation (include a written explanation or labels)
VISUAL SPATIAL Design a graphic organizer (e.g., concept map with connecting phrases between)	WILD CARD (free choice)	INTERPERSONAL Write a short story that incorporates characters and a plot.
MUSICAL-RHYTHMIC Create a rap, jingle or song	INTERPERSONAL Develop a role play, a short slide presentation, or a YouTube video	VERBAL LINGUISTIC Create a poem, poster or print advertisement

Assessment Rubric 1: Knowledge and Understanding

CRITERIA	LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
Understanding of relationships among concepts (electronegativity, bonding, and the polarity of molecules)	Demonstrates the relationship between electronegativity, binding and molecular polarity with a high degree of depth	Demonstrates the relationship between electronegativity, binding and molecular polarity in considerable depth	Demonstrates the relationship between electronegativity, binding and molecular polarity with some depth	Demonstrates the relationship between electronegativity, binding and molecular polarity with limited depth

Assessment Rubric 2: Communication

CRITERIA	LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
Incorporation of required scientific terms	At least all required scientific terms were included	The majority (80%+) of required scientific terms were included	A portion (50-79%) of required scientific terms were included	Most (>50%) of the required scientific terminology was excluded
Uses scientific terminology	Uses scientific terminology with a high degree of appropriateness	Uses scientific terminology with considerable appropriateness	Uses scientific terminology with some appropriateness	Uses scientific terminology with limited appropriateness
Expression and organization of information (e.g, clear expression, logical organization) in oral, visual, and/or written forms (e.g., diagrams, models)	Expresses and organizes information with a high degree of effectiveness	Expresses and organizes information with a considerable degree of effectiveness	Expresses and organizes information with some degree of effectiveness	Expresses and organizes information with limited degree effectiveness
References	All sources were appropriately cited	N/A	N/A	All sources were not appropriately cited

Teacher feedback:

Student comments: