Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **CHemistry Interactive Learning Log 14**

Directions: For each concept cube use your class packet, notes, and edpuzzle videos to fill in each section. Then complete the “reflections of learning” questions in order to qualify for the opportunity to have your participation grade replaced by your quiz/exam grade. *The log will be due on the day of the exam/quiz.* You may add additional pages to this handout if you need more room for additional notes or evidence of learning.

* Narrative: Describe and explain the concept. Define new vocabulary.
* Model: Sketch a particle diagram that can help to explain the concept with a key, labels, and notes.
* Mathematical: Provide a numerical relationship connected to the concept. Include units.
* Graphical: Sketch of a graph related to the concept with axes labeled. Define the relationship shown.
* Experimental: Review the procedures, observations, and conclusions of a lab related to the concept.
* Examples: Record examples of the concept (with answers) from labs, quizzes, and packet problems.

| **Decay Modes 🙂😐😟** |
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| **Narrative** (all modes with symbols explained) | **Model** (penetrating power) |
| **Examples** (transmutation reactions) |

| **Half Life 🙂😐😟** |
| --- |
| **Narrative** | **Model** |
| **Mathematical** | **Graphical**  |

| **Fission 🙂😐😟** |
| --- |
| **Narrative** | **Model** |
| **Uses** | **Example** |

| **Fusion 🙂😐😟** |
| --- |
| **Narrative** | **Model** |
| **Uses/Compare to Fission** | **Example** |

| **Benefits and Risks 🙂😐😟** |
| --- |
| **Narrative** Benefits | **Narrative** Risks |
| **Examples** (list well known isotopes and use) |

Reflections of Learning: Please provide thoughtful reflections that answer the questions below.

1. Describe the effort you put into understanding the content in the **videos**. **Defend** your score with an explanation of your video work.

| **Needs Improvement-1** | **Developing-2** | **Proficient-3** | **Mastery-4** |
| --- | --- | --- | --- |
| Didn’t attempt most videos. When videos were attempted, little/no notes were taken. Videos were not often rewatched or rewinded. Did not contact the teacher for help. | Attempted a few videos. Sometimes notes were taken. Rarely videos were rewatched and/or rewinded. May have contacted the teacher for help a few times. | Attempted most videos. Notes were taken as needed but pretty often. Videos were rewatched and/or rewinded as needed. Contacted the teacher for help when needed.  | All videos were attempted. Notes taken on all videos. Videos were rewatched and/or rewinded when needed. Contacted the teacher for help when needed.  |

1. Describe the effort you put into understanding the concepts in the **labs**. **Defend** your score with an explanation of your lab work.

| **Needs Improvement-1** | **Developing-2** | **Proficient-3** | **Mastery-4** |
| --- | --- | --- | --- |
| Absent or did not participate in most labs. Copied data and answers from other students with little to no understanding. Labs were submitted late, incomplete, or not at all. | Mostly participated during labs. Worked with my team to develop answers but other teammates seem to contribute more. Labs were mostly submitted on time and mostly complete. | Participated in all labs. Worked with my team to develop answers equally. Labs were mostly submitted on time and complete. | Participated in all labs. Worked with my team to develop answers. I was a leader of the lab. Labs were mostly submitted on time and always complete. |

1. Describe the effort you put into studying for **quizzes** and reviewing quizzes. **Defend** your score with an explanation.

| **Needs Improvement-1** | **Developing-2** | **Proficient-3** | **Mastery-4** |
| --- | --- | --- | --- |
| Did not study for quizzes. When quizzes were handed back, I rarely took notes about incorrect answers. | Occasionally studied for quizzes by rereading notes and/or rewatching videos. When quizzes were handed back, I sometimes took notes about incorrect answers. | Studied for most quizzes by rereading notes and retrying old practice examples. When quizzes were handed back, I asked questions and took notes about incorrect answers. | Studied for most quizzes by rereading notes and retrying old practice examples. Studied with my peers by quizzing ourselves. When quizzes were handed back, I usually asked questions and took notes about incorrect answers.  |

1. Which is your favorite nuclear isotope? Why?