Mind Map: Turning a Topic into a Question

Purpose:

Turn a broad research topic into a specific research question by:

- Brainstorming broad categories of questions and ideas
- Listing keywords that fall within those ideas
- Connecting keywords that spark interest into a research question

Time:

15 minutes to complete the group Mind Map

5 minutes allotted for students to work on their individual Mind Maps

Total: 20 minutes

Materials:

- A digital mind map shared on a projector screen or through virtual learning platform, such as Zoom
- Enough Mind Map handouts, digital or physical, for each student
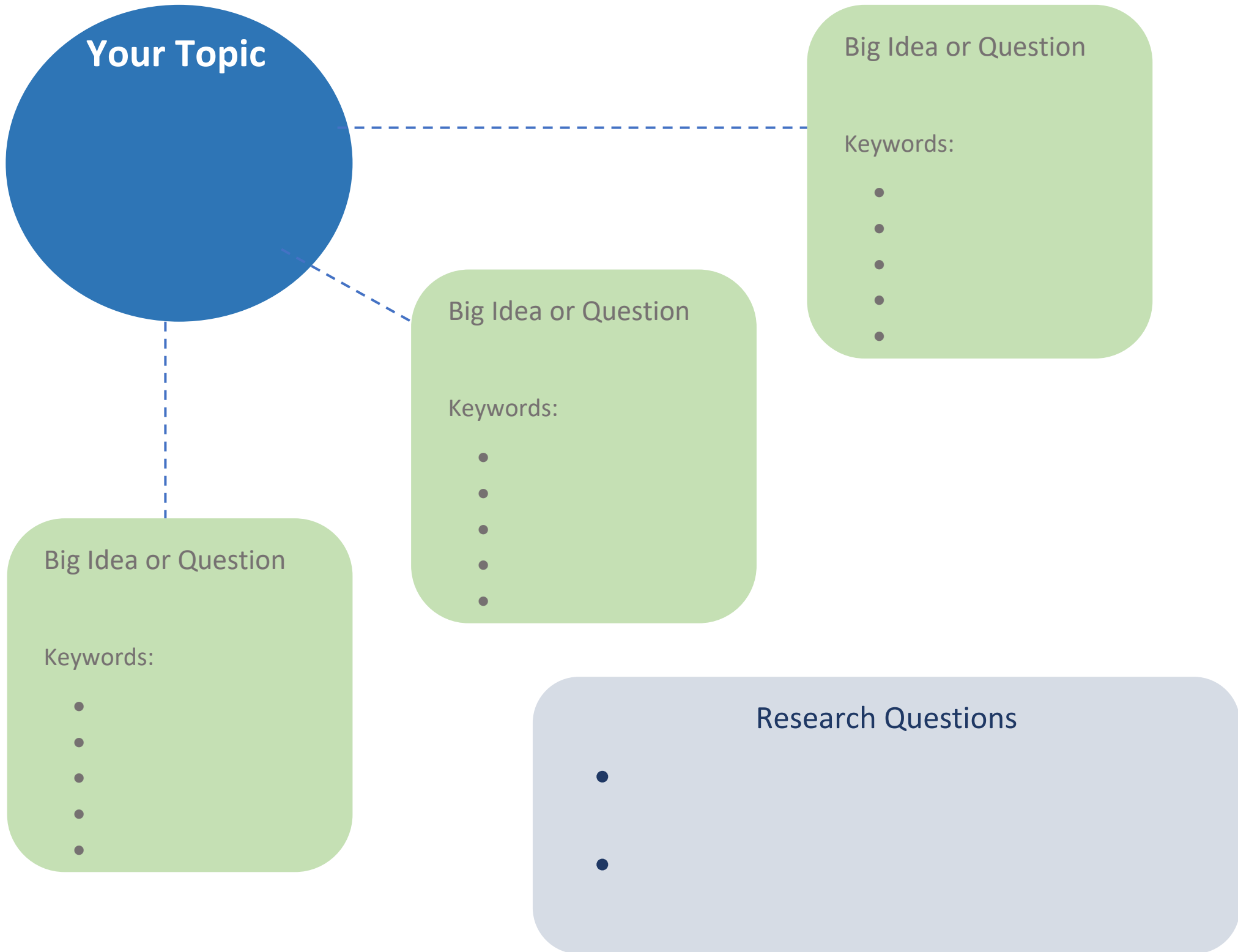- Writing utensils for students if in-person

Outline:

1. While sharing an editable mind map with the entire class (either projected in a classroom or shared in a virtual learning environment) ask for a volunteer to share their topic or select a topic of your choosing to add into the Topic box
2. As a group, ask students what big ideas or questions come to mind when they think about the topic and write down three of those ideas or questions, one in each of the "Big Ideas" boxes
3. Focusing on one Big Idea at a time, ask students to brainstorm/think out loud/word vomit words that are related to the Big Idea and the original topic, until all Big Ideas have a list of keywords underneath them
4. As the instructor, demonstrate how to build a research question by combining two of the keywords (ideally from different Big Ideas) to form a question
5. Give the students a minute to use the group example to generate another research question and ask for volunteers to share the research questions they came up with
6. Give the students about 5 minutes to fill out an individual Mind Map with their own topic, providing help as needed
7. Solicit volunteers to share their research questions

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Your Topic

Big Idea or Question

Keywords:

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Big Idea or Question

Keywords:

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Big Idea or Question

Keywords:

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Research Questions

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Climate Change

Where did it come from?

Keywords:

- Corporations
- Factories
- Cows??
- Agriculture
- Cars
- Oil

How do we stop it?

Keywords:

- Legislation
- Green products
- Public Transit
- Green energy
- Windmills
- Solar panels

What is it doing?

Keywords:

- Rain (acid?)
- Temperatures
- Glaciers
- Sea levels
- Hurricanes

Research Questions

- What are the effects of raising cows on greenhouse gas levels?
- Is state legislation an effective way to promote green energy initiatives?