<u>Content Objective:</u>

Students will identify and analyze data topics with line graphs with missing labels.

Students will apply what they know about the topics and add titles, axes labels and other graph information.

<u>Language Objective:</u>

Students will use language frame to explain why they paired graphs with titles.

Students will write "news" stories based on the graphs they piece together describing the trends in the graphs.

Key Vocabulary: graph, x-axis, y-axis, title, trend, scale

<u>Materials:</u>   Sentence Strips, Posters with Line Graphs (unmarked), Worksheet packet, Think Cards

<u>Procedure:</u>

1. Introduction: "We will be working as news reporters today. But we have a problem! All of the data for our news stories have been mixed up in an awful mistake…someone's going to lose their job over this, unless we can help them out!"

2. Review vocabulary: Make sure students understand the term *trend*.

3. Students will do Math Message that models the way to choose a graph.

4. Students will be shown a list of sentence strips with the different data titles they will be asked in their group to match up post-it notes corresponding to the different graph titles to the pre-(teacher) drawn line graphs on the posters around the room.

    The graph titles will be:
    1. Number of Jelly beans sold through the year.
    2. Amount of snow fall through the year.
    3. Number of people in school through the year.
    4. Amount of ice cream sold during the year.
    5. Amount of people at Hammonasett Beach in Connecticut during the year.
    6. Times when there are tests during the year.

Hot Questions: *What makes you think _____ fits this graph?*

Do you think there are two graphs that are similar?

Do you notice any patterns in the graphs?

Can you see any similarities among the graphs? Among the data subjects?

> ✓ CHECK POINT!!! Explain the choices your team has made!
> (EVERYONE IN THE GROUP SHOULD KNOW HOW TO EXPLAIN THE
> PATTERN IN ORDER TO GET THE CHECKPOINT!!!)

5. Discuss the findings of the groups through a gallery walk around the room. Point out consensus and controversies among what the groups have chosen.

Hot Question: *Do you think that if more than one group agrees on a data set-graph combination that its true?*

Why do you think there is so much confusion about this graph?

6. Each group may choose a graph to label with a title, and axes. Make sure students understand how they can describe the data reasonably (scale etc…)

Hot Question: *Does it make sense to have the graph go all the way to _____ ?*

What do you think would happen if the scale is too big for the graph?

Can anyone add to that?

How can you determine the best scale for the graph?

> ✓ CHECK POINT!!! Explain the graph's title, label, scale, does it describe the data
> well?
> (EVERYONE IN THE GROUP SHOULD KNOW HOW TO EXPLAIN THE PATTERN IN
> ORDER TO GET THE CHECKPOINT!!!)

7. Students will now write a news story in regards to the graph they have chosen.

8. Students will put on a news show with their news stories describing the data.

Math Message

Match one of these three graphs to the following graph title: Amount of turkeys sold during a year.

A	B	C

Tell why the graph fits the title:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Name: _____ Date:_____

Batchelder News!

Explain why your group chose to match each title to the graphs.

For title one, we chose graph:

_____

because

_____
_____
_____

For title two, we chose graph:

_____

because

_____
_____
_____

For title three, we chose graph:

_____

because

_____
_____
_____

For title four, we chose graph:

_____

because

_____
_____
_____

For title five, we chose graph:

_____

because

_____
_____
_____

For title six, we chose graph:

_____

because

_____
_____
_____
_____

✓ CHECK POINT!!! Explain the choices your team has made!
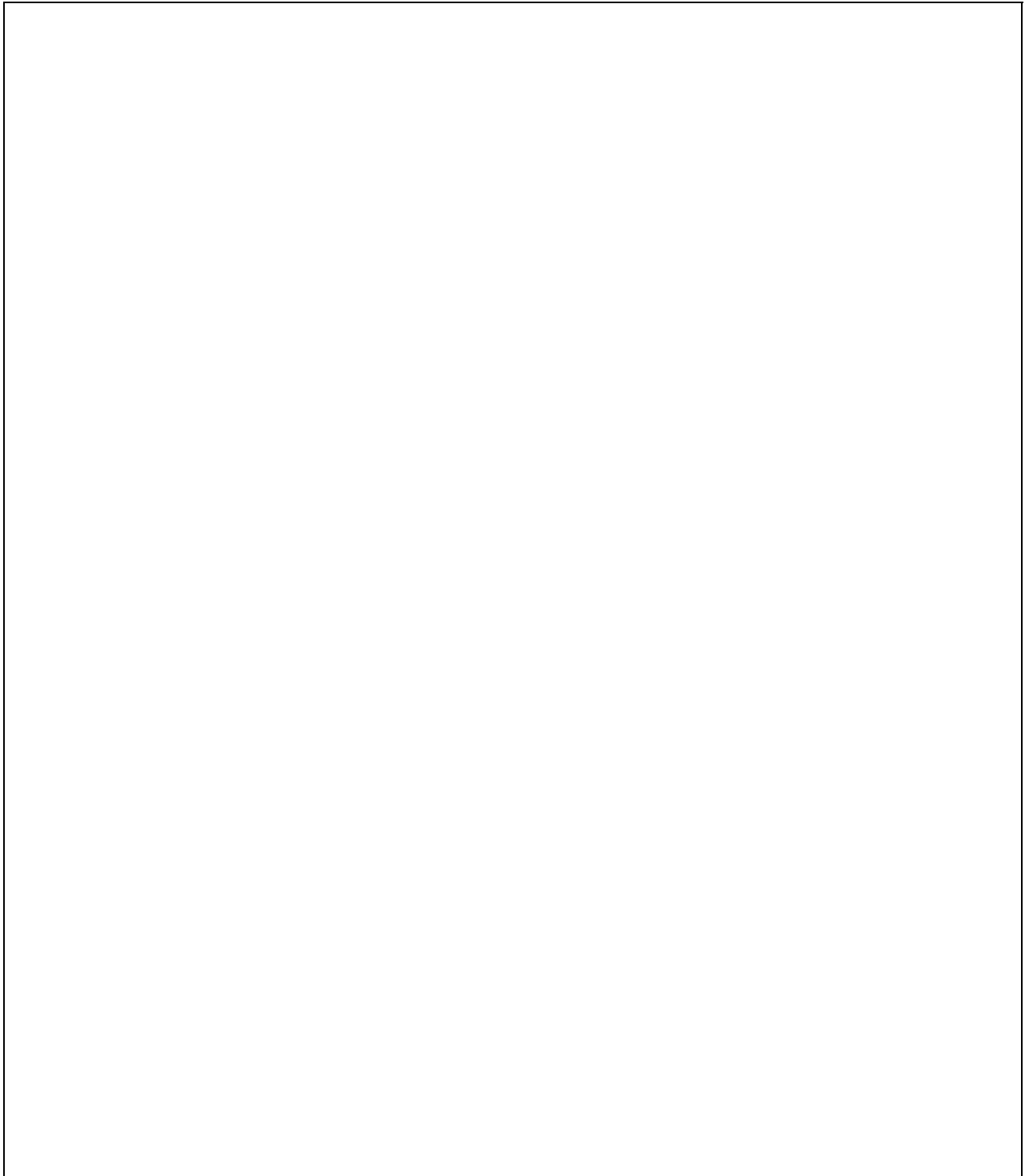
✓ CHECK POINT!!! Explain the graph's title, label, scale, does it describe the data well?
(EVERYONE IN THE GROUP SHOULD KNOW HOW TO EXPLAIN THE PATTERN IN ORDER TO GET THE CHECKPOINT!!!)

Batchelder News Story

Now you will write a story based on the graph of your choice!

In other news tonight
_____
_____
_____
_____

The graph shows that
_____
_____
_____
_____
_____

Experts on the subject support the graph saying
_____
_____
_____
_____
_____

For more information on
_____
_____
go to www._____

Think and Hint Cards:

HINT: Think about the time of year that some things happen more often.	*HINT:* What would cause a trend to go up? What would cause a trend to go down?	*HINT:* Are there two graphs that are similar? What is different about them?	*HINT:* What would you expect the graph for each trend to look like?
THINK: How would the graph change if during the year there was a change in what usually happens?	*THINK:* Would you change one of the graphs? Why?	*THINK:* If two graphs were similar to each other, what made you choose to label one topic over another?	*THINK:* Can you draw a graph showing a trend for a topic of your choice?