We "dig deeper" by using…

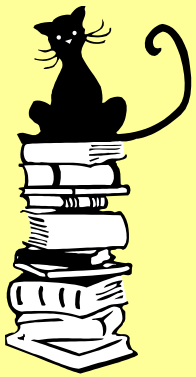
ICONS of DEPTH and COMPLEXITY

- Details
- Language of the Discipline
- Unanswered Questions
- Pattern
- Rules
- BIG Idea
- Perspectives
- Relationships Across Disciplines
- Relationship Across Time
- Trends
- Ethics

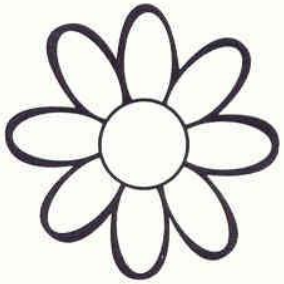
Welcome!

Presented by:

Melissa Priest and Veronika Saparova

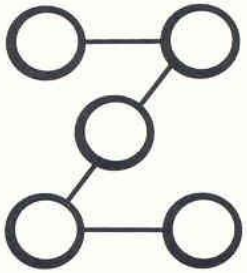


Icons of Depth and Complexity



DETAILS

LANGUAGE OF THE DISCIPLINES

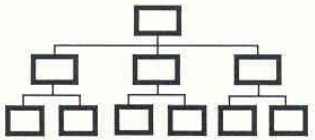


PATTERNS

MULTIPLE PERSPECTIVES

UNANSWERED QUESTIONS

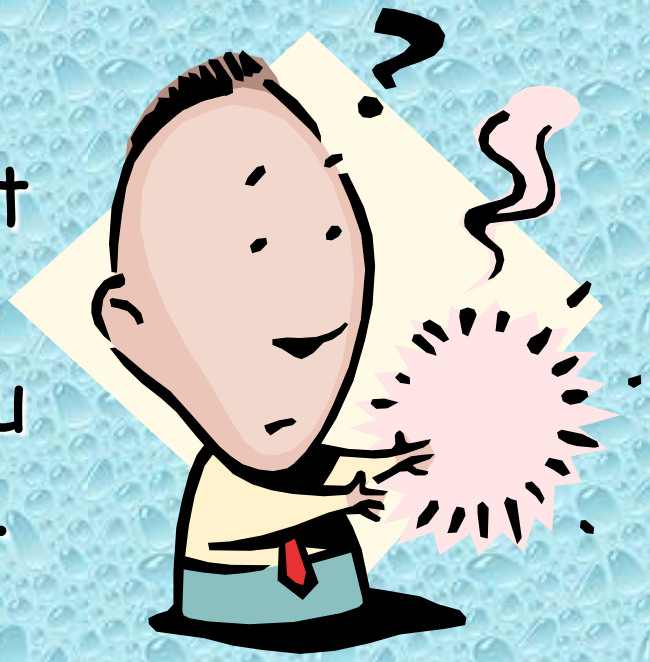
BIG IDEA



RULES

ICONS are Thinking Tools

You can use these icons to help you **THINK** more deeply about the things that you are learning about and the stories that you read. These icons help you **FOCUS** your thinking, too.



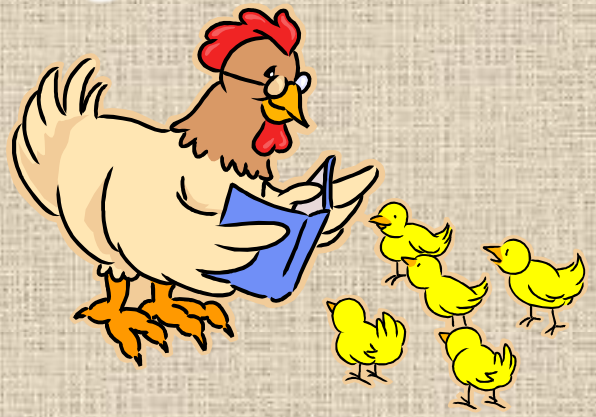
To illustrate this…

We will review a very familiar story, "The Little Red Hen."

Here we go…

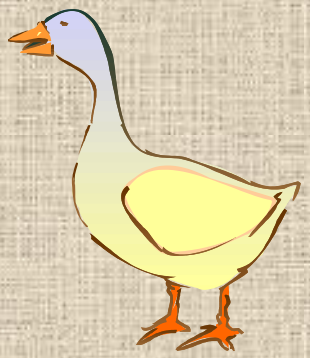
The Little Red Hen

There once was a little red hen who lived on a farm. The hen's friends were a little black dog, a big orange cat, and a little yellow goose. One day, the red hen found some grains of wheat. "I can make bread from this," thought the red hen.



The little red hen asked, "Who will help me plant the wheat?"

"Not I," said the little black dog.
"Not I," said the big orange cat.
"Not I," said the little yellow goose.



"Then I will do it myself," said the little red hen. And she planted the wheat without any help at all.

The little red hen asked, "Who will help me cut the wheat?"

"Not I," said the little black dog.
"Not I," said the big orange cat.
"Not I," said the little yellow goose.

"Then I will do it myself," said the little red hen. And she cut the wheat without any help at all.

The tired little red hen asked, "Who will help me take the wheat to the mill and grind it into flour?"

"Not I," said the little black dog.
"Not I," said the big orange cat.
"Not I," said the little yellow goose.

"Then I will do it myself," said the tired little red hen. So she took the wheat to the mill and ground it into flour without any help at all.

The very, very tired little red hen asked, "Who will help me bake the bread?"

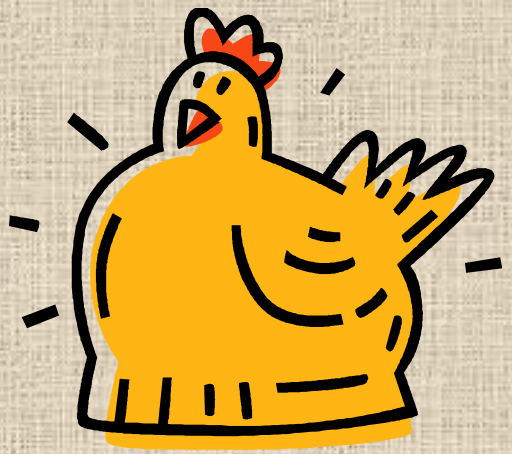
"Not I," said the little black dog.
"Not I," said the big orange cat.
"Not I," said the little yellow goose.

"Then I will do it myself," said the very, very tired little red hen. And she baked the bread without any help at all.

The hot, fresh bread smelled very good. The little red hen asked, "Now, who will help me eat this bread?"

"I will!" said the little black dog.
"I will!" said the big orange cat.
"I will!" said the little yellow goose.

"No, you won't! I will do it myself!" yelled the little red hen. And she ate the bread without any help at all.



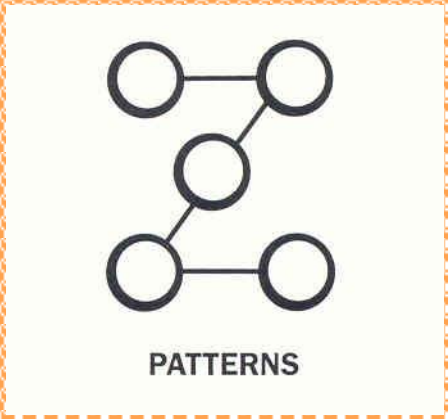
The End

DETAILS

- characters
- setting
- problem in the story
- story information

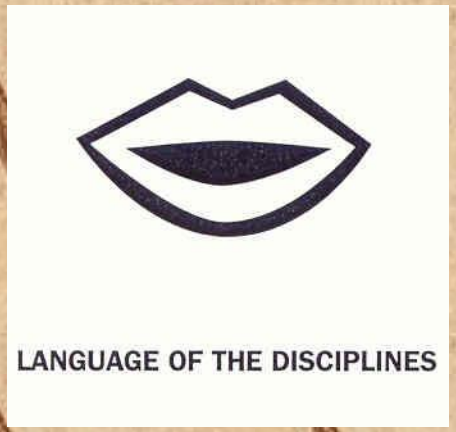
PATTERNS

- things that repeat
- follow a sequence
- can be predictable



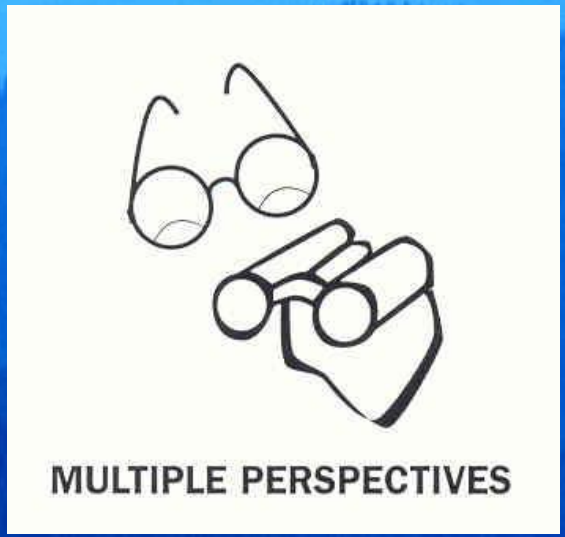
Language of the Discipline

- vocabulary
- important words
- words that the "disciplinarian" (*farmer, mathematician, scientist, etc.) would use*



Perspective

- point of view
- "seeing" through someone else's eyes
- wondering how different characters think about what happened



Unanswered Questions

- What else do you want to know about the characters (or setting, etc.) that WAS NOT written in the story?
- What information was not answered?

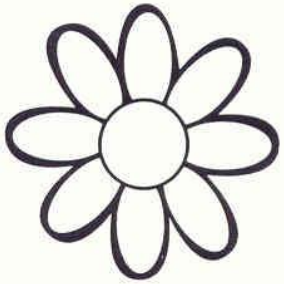
BIG IDEA

- What was the moral of the story?
- What **important lesson** did you LEARN from the story?
- What is the "main idea" of the story?

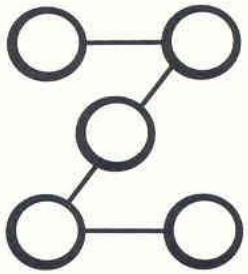
There are more icons of depth and complexity…

But, for now, let's quickly recap the ones we learned…

Icons of Depth and Complexity



DETAILS



PATTERNS

LANGUAGE OF THE DISCIPLINES

MULTIPLE PERSPECTIVES

UNANSWERED QUESTIONS

BIG IDEA

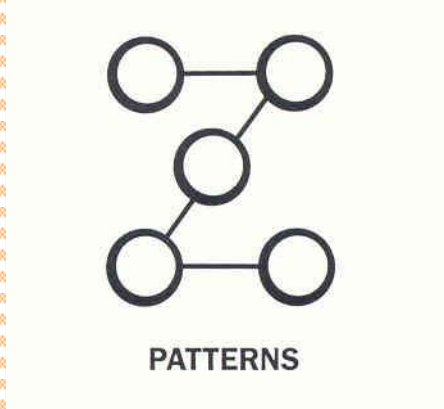
Frame Activity

DETAILS

- name
- birthday
- "favorites"
- city you live in
- brothers? sisters?
- information about YOU

PATTERNS

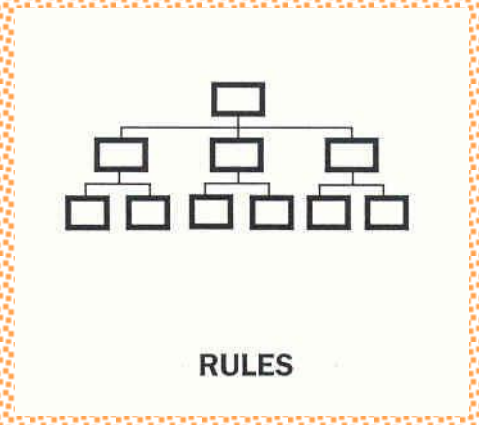
- what do you do most every morning? (*brush teeth, etc.)*
- activities you do on certain days of the week (*piano on Thursdays, etc.)*
- *things which REPEAT in your life*



A new one... RULES ☺

- rules which you follow at school
- rules you follow at home
- your family's rules for you
- your "rules" for yourself

"Don't cheat."



Unanswered Questions

- What would you like to know more about?

OR

- What questions would you like someone to ask YOU which you haven't already answered on your "frame."

Think! Think! Think!

question, wonder, critique,
compare, recognize, evaluate,
infer, categorize, experiment,
read, write, solve…

…and HAVE FUN!

Why Depth and Complexity Icons?

- **Depth** refers to the concept of challenging learners by enabling them to venture further, DEEPER, more elaborately in the area under study.
- **Complexity** refers to the concept of broadening the learner's understanding of the area(s) under study by asking him/her to make connections, relations, and associations between, within, and across subjects and disciplines.

Icons of Depth and Complexity are teaching tools and thinking tools.

Icons should be used DAILY…

- "language of the discipline" instead of *vocabulary words*
- "perspective" of different characters in story, scientists (geologist vs biologist), animals/plants in an ecosystem
- "big idea" to summarize and generalize
- "rules"… of fractions, subtracting across zeros, writing a friendly letter

???

- Think of some other ways that we can use the icons of depth and complexity. Share these ideas with someone at your table.

Content Imperatives

We are including some handouts on more GATE thinking tools called *Content Imperatives*. These are fantastic to use… especially in grades 3 and up.

☺

CONTENT IMPERATIVES

- Convergence
- Origin
- Contribution
- Paradox
- Parallel