Comprehension Strategies

Questioning

This document is the second in a series of support materials. It contains a synthesis of material from a variety of on-line and printed sources. It has been designed to support the Northern Adelaide Region Comprehension focus 2010-2012

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Questioning

Comprehension is "making meaning" of texts. Texts, for the purpose of this document, include printed, visual, auditory, digital and multi-media texts.

Students find it difficult to comprehend or make meaning when they lack:
- A repertoire of comprehension strategies
- Background knowledge of the content – including the specific vocabulary
- Knowledge of the structures and features of the text
- A purpose for engaging with the text

Questioning is a strategy that can assist in making meaning from a text.

Good readers ask questions before, during, and after they read to clarify meaning, to make predictions, and to identify what is important. They conduct an ongoing dialogue with each page they read. Questioning leads readers deeper into the text, setting up a dialogue with the author. Readers who ask questions are awake, thinking and interacting with the words. Asking questions is how readers make sense of the world. The National Reading Panel found that teaching students to ask questions gave the second greatest learning advantage of any single strategy.

Teachers and parents can encourage and model questioning from an early age:

For Preschool Readers:
- Model questioning for your child
- Ask questions about the cover and any pictures in the book
- Ask questions about what might happen next before turning the page
- Encourage the child to ask questions about the book
- Give praise for asking questions

For Emerging Readers:
- Model deeper questioning (why something might happen)
- Use questions that lead to discussion
- Ask questions about word meaning
- Ask questions that go beyond the book
- Give praise for asking questions

For Advancing Readers:
- Model how to question the author
- Ask the child what questions he/she is asking during the reading process
- Show the child how to jot questions on sticky notes in the margins
- Show the child how some questions may be answered in the text
- Show the child how to find or generate answers that are not in the text

Please note: *the following pages provide examples and ideas that can be adapted for your classroom. The lesson plans, graphic organisers and posters are provided as support materials and are not meant to be used as one-off independent activities. It is expected that all strategies be modelled and made explicit to students before they are able to apply them independently. See "Strategies that Work" Part 1 for rationale and methodology.*

Questioning Strategy

Questioning occurs as a natural part of the classroom routine as teachers encourage students to pose, discuss, and answer questions. Questions can be generated by the reader, a peer, the teacher, or curriculum developers. Any one of these kinds of questions can be answered by the student individually, after discussion with others, or in collaboration with a peer. While most questions require having the text available, some might not.

Questions with different purposes can be asked and answered before, during, and after reading. Before students read, they often use questions to activate prior knowledge, make predictions, and wonder about big ideas that are not answered in the text. During reading, students form questions to compare and generalize, identify the theme, and clarify meaning. After they read, students use questioning to locate information, understand and remember events and characters, and identify the theme.

Questioning is s strategy that is inextricably linked with all the other comprehensions strategies. In Booklet 1: **Making Connections** a range of questions are used to facilitate making text-to-self, text-to-text and text-to-world connections.

Teacher Questioning

Questions to Help Assess Reading
From: Improving Comprehension with Think-Aloud Strategies • Scholastic Professional Books

The following guidelines will be helpful whenever you engage in a think-aloud with a student. Refer to them as you study a think-aloud transcript, or when you talk it over with a student, or even use these guidelines to ask students to assess themselves. They will provide rich feedback and fodder for both assessment and planning. Obviously you would not use all of these at the same time; you would pick and choose the guidelines that you are helping a student to work on. What I've tried to do here is to cite a full range of strategic knowledge and expertise that think-alouds can help you to assess. Following are some of the reading strategies and behaviours that you can assess with think-alouds:

1. Does the reader understand her purposes for reading a particular text?
___ Is the purpose personal?
___ Is the purpose socially significant?
___ Does the purpose consider a task that the reading can help to complete?
___ How can the reading be made more purposeful?

2. Does the reader understand (or attempt to understand) the purposes and goals of the author?

3. Does the reader bring personal background knowledge to bear in understanding the text?
___ What are the reader's primary sources of information about the world? About the text?
___ How are these sources brought to bear during the reading act?
___ How might the use of these information sources be expanded or assisted?

4. How well does the reader bring knowledge forward from one part of the text to another, from one text or activity to another text or activity?
___ Can the reader retell, talk back, paraphrase?
___ Can the reader make connections between different pieces of information from separate parts of the text to make inferences, see coherent patterns?

5. How well does the reader employ other general processes of reading?
___ Does the student have high expectations of print?
___ Does the student predict and verify predictions?
___ Does the reader ask questions and interrogate text?
___ What kinds of questions are asked?
___ Are question types varied to kind of text?

___ Does the reader ask inference questions? author and me questions? on-my-own or world questions?
___ Does the reader ask for help? ask stimulating questions of self and others?
___ Does the reader ask questions and make connections that help apply what is read to the real world? that transfer new processes of reading to new texts?
___ Does the reader respond emotionally?
___ Does the reader visualize settings, situations, characters of story? form mental representations of informational texts?
___ Does the student have other sensory experiences, hearing dialogue, etc.?
___ Does the reader provide evidence of comprehension monitoring? Strategy adjustment?
___ Does the reader identify confusion, ask if it "makes sense," and apply fix-up strategies when needed?
___ Is reading speed varied for different situations? Does the student pause or stop and apply fix-up strategies?
___ How does the student deal with problems and frustration?
___ Are there other strategies that would be helpful to the reader?

6. How independent is the reader with a particular text or kind of text?
___ Where is the reader's ZPD? (Zone of Proximal Development)
___ Is the text easy (at the independent level)?
___ Is the text too challenging (at the frustration level) because the reader does not have necessary background, understanding of purpose, knowledge of vocabulary, knowledge of text-type and attendant codes and strategies expected?
___ If the text is too challenging, can frontloading of content or strategy use make the text accessible in the ZPD?
___ Where are comprehension and engagement faltering?
___ At what point in a particular text is instruction and guidance necessary?

7. How well does the student understand global structures of organizing text?
___ Does the reader recognize how particular text-types serve different authorial purposes?
___ Does the reader recognize particular text-types and how they proceed from beginning to middle to end?
___ Does the reader understand and represent the different ways of presenting textual ideas (chronologically, classification, comparison-contrast, description, argument, etc.) and the uses and strengths of each?
___ Does the student understand the textual expectations (different codes and conventions, and the strategies for recognizing and interpreting these) of particular text-types?
___ Is knowledge of text structure used to improve comprehension?
___ Does the student integrate information from various parts of a text?

8. Does the student recognize text as a construction of an author?
___ How well does the reader talk back or converse with an author? How often does the reader question, agree, or disagree with an author? Does the student ever talk back to an author?

9. How well does the reader use local-level coherence to make links within sentences or to connect sentences? to link different parts of a text together?

10. How well are inference gaps recognized and inferences made?

11. How often does the reader encounter unfamiliar words?
___ What strategies are used to deal with vocabulary challenges?
___ What other strategies could be used?

12. How well does the student recognize and use particular codes and conventions?
___ What cues are noticed, used, and not used?
___ How much and what kind of guidance is needed to help the student use them?

13. How wide a variety of strategies are used with particular texts?
___ Poorer readers tend to use only one or two strategies and to use these repeatedly, even when inappropriate. If only a few strategies are used repeatedly, students can use assistance to widen repertoire and to recognize when and how new appropriate strategies may be used. Older poor readers tend to use the same strategies as better readers, but less effectively, appropriately, or flexibly.
How can teaching help expand and improve on this?

14. How well does the student learn information from text? learn ways of reading?
___ How well is this transferred and applied to new situations?
___ How can the teacher help assist transfer?

15. How willing is the student to take risks, go beyond the literal text, hypothesize?
___ Too many text-bound comments work against active comprehension and suggest that the teacher should use interventions to foster hypothesizing, predicting, inferring, elaborating, evaluating, and conversing with author.

16. How does the think-aloud reveal unsuspected strengths?
___ How can these be celebrated and built upon?

Teacher and Student Check Sheets

Check sheets are highly adaptable—you can use them to evaluate individual readers, see patterns among students, or you can give them to students for use in evaluating themselves and each other. They can also provide great communication with parents about what you are trying to teach, how well their child is doing, and what they might do at home to help out. Below is a variation on a general processes check sheet.

General Processes Check Sheet

Self-Evaluation	not much	sometimes	often
1. Used personal background knowledge			
2. Made predictions			
3. Corrected predictions			
4. Asked questions			
5. Used images to see			
6. Was aware of problems			
7. Used fix-ups			

The Reading Process

Before Reading	During Reading	During and After Reading
• Determine a purpose for reading.	• Use strategies to make meaning, such as:	• Assess, critique, and reflect on the text.
• Decide on an appropriate reader's stance (for example, reading for pleasure or for information).	– making connections	
• Select an appropriate text.	– determining important information	
• Preview the text (for example, by scanning the cover, title, organization, layout).	– questioning	
• Activate prior knowledge (for example, by recalling what you know about the text form, author, topic, similar texts).	– visualizing	
	– summarizing	
	inferring	
	– predicting	
	– synthesizing	
	– evaluating	
	– monitoring and repairing understanding	

Questioning occurs before, during and after reading

Before reading, I ask myself:

What do I already know?

What would I like to know?

What do I need to know?

I wonder if …?

What is my purpose for reading?

What do I need from this text?

What does this text require of me?

What strategies will I use to help me remember or keep track of my thinking?

During reading, I think to myself:

Does this make sense?

Hmm, I wonder…?

That reminds me of …

I think … because …

I still need answers to the question …

What is this author's intent?

Why am I feeling this way?

Does this information align with what I already know?

During and after reading, I ask myself:

Why did the author write this?

Whose voice is represented?

Whose voice is missing?

What do I know now that I didn't know before I read this?

If I had to tell someone about what I just read, what would I say?

How will I remember this information?

What will I do with this information?

Do I need to seek another perspective?

Questioning Strategies before Reading

The purpose of posing questions before reading is for readers to:

- Elicit prior knowledge related to the core ideas of the text
- Make connections between what they know and the subject of the text
- Set a purpose for reading
- Construct predictions

Below we list research-based strategies for questioning before reading. For each strategy we provide a description and links to additional information, classroom examples, and lesson plans.

KWL (Know Want Learn)
Students organize their information about a topic using a three-column chart.

K stands for Know.
What do I already **know** about this topic?

W stands for Will or Want.
What do I think I **will** learn about this topic?
What do I **want** to know about this topic?

L stands for Learned.
What have I **learned** about this topic?

Here are some web sites that show this strategy in action:

Reciprocal Reading
Students working in small groups of four are each assigned a role before they read:

- Predictor
- Questioner
- Clarifier
- Summarizer

During the reading, they take notes and then discuss the text from the point of view of their role. They then switch roles and repeat the process.

Scaffolded Reading Experience (SRE)
SRE uses teachers' questions as the basis for the pre-reading engagement of students with text. This process uses scaffolding, which provides students with the necessary assistance in preparation, guidance, and follow-up to help them make connections with the text.

Directed Reading Activity (DRA)
This process uses teachers' questions to activate prior knowledge, create interest, and establish the purpose for reading.

Pre-Reading

Title:	
Author:	
Read the title. What do you think the book will be about?	
After flipping through the pages, what can you learn about the setting?	
After flipping through the pages, what can you learn about the characters?	
After flipping through the pages, what can you learn about the plot or conflict?	
Explain what you think of when you scan this book. Does it remind you of another book you have read?	
Are you excited to read this book? What questions do you hope get answered?	

Questioning Strategies during Reading

Questioning during reading should help the reader to:

- Clarify and review what has happened so far
- Confirm or create new predictions
- Evaluate the text critically and make personal connections
- Compare with other experiences or readings
- Monitor reading for meaning and accuracy

Below we describe strategies to use during reading. For each strategy we provide a description and give links to additional information and classroom examples.

Questioning the Author
As students read, they develop questions for the author about the author's intent for the selection and his or her success at communicating it. One format uses these questions:

- Why is the author telling you that?
- Does the author say it clearly?

- How could the author have said things more clearly?
- What would you say instead?

Another modification of this approach is to have students rewrite a selected passage.

Learning Logs
Students record their questions about the text in a notebook, on a handout, or by using sticky notes. Students enter their reactions during and after reading a text.

Double Entry Journal
In the left-hand page or column, students ask questions. After reading, in the right-hand column they answer the questions.

Think-Aloud
The purpose of a think-aloud is to capture the student's thinking about the text during the reading process. The teacher selects a piece of text to model the strategy to the students. While reading the text aloud, the teacher says things such as, "I don't understand this word. Maybe if I keep reading I will find out."

Discussion Webs
A discussion web uses a graphic aid for teaching students to look at both sides of an issue before drawing a conclusion. Students are asked to respond to a yes-no thinking question individually, in pairs, with another set of pairs, and then with the whole class.

Think-Pair-Share
Students are given a question. They think about the answer individually, in pairs, and then in small groups to reach a consensus.

Questioning Strategies after Reading

The purpose of post-reading strategies is to extend the reading experience by helping the reader to:

- Reinforce the concept that reading is for understanding the meaning of the text and making connections
- Model ways of thinking through and organizing the information taken in from reading a text
- Think critically about the text
- Respond on a personal level

Below are questioning strategies to use after reading. For each strategy we provide a description and give links to additional information and classroom examples.

Journal Writing
On a regular basis, students record their questions, comments, reflections, and reactions in a journal.

Teacher Questions
The teacher leads large and small group discussions using various question guides.

ORQ - Observe, Ruminate, Question
Students make an observation based on the reading, and then they ruminate or extend it. They end with a final question.

Questioning the Author
As students read, they develop questions for the author about the author's intent for the selection and his or her success at communicating it. One format uses these questions:

- Why is the author telling you that?
- Does the author say it clearly?
- How could the author have said things more clearly?

- What would you say instead?

Another modification of this approach is to have students rewrite a selected passage.

Socratic questions

Socrates was one of the greatest educators who taught by asking questions and thus drawing out (as 'ex duco', meaning to 'lead out', which is the root of 'education') answers from his pupils. Here are the six types of questions that Socrates asked his pupils.

Conceptual clarification questions

Get them to think more about what exactly they are asking or thinking about. Prove the concepts behind their argument. Basic 'tell me more' questions that get them to go deeper.

- *Why are you saying that?*
- *What exactly does this mean?*
- *How does this relate to what we have been talking about?*
- *What is the nature of ...?*
- *What do we already know about this?*
- *Can you give me an example?*
- *Are you saying ... or ... ?*
- *Can you rephrase that, please?*

Probing assumptions

Probing of assumptions makes them think about the presuppositions and unquestioned beliefs on which they are founding their argument. This is shaking the bedrock and should get them really going!

- *What else could we assume?*
- *You seem to be assuming ... ?*
- *How did you choose those assumptions?*
- *Please explain why/how ... ?*
- *How can you verify or disprove that assumption?*
- *What would happen if ... ?*
- *Do you agree or disagree with ... ?*

Probing rationale, reasons and evidence

When they give a rationale for their arguments, dig into that reasoning rather than assuming it is a given. People often use un-thought-through or weakly understood supports for their arguments.

- *Why is that happening?*
- *How do you know this?*
- *Show me ... ?*
- *Can you give me an example of that?*
- *What do you think causes ... ?*
- *What is the nature of this?*
- *Are these reasons good enough?*
- *Would it stand up in court?*
- *How might it be refuted?*
- *How can I be sure of what you are saying?*
- *Why is ... happening?*
- *Why? (keep asking it -- you'll never get past a few times)*
- *What evidence is there to support what you are saying?*
- *On what authority are you basing your argument?*

Questioning viewpoints and perspectives

Most arguments are given from a particular position. So attack the position. Show that there are other, equally valid, viewpoints.

- *Another way of looking at this is ..., does this seem reasonable?*
- *What alternative ways of looking at this are there?*
- *Why it is ... necessary?*
- *Who benefits from this?*
- *What is the difference between... and...?*
- *Why is it better than ...?*
- *What are the strengths and weaknesses of...?*
- *How are ... and ... similar?*
- *What would ... say about it?*
- *What if you compared ... and ... ?*
- *How could you look another way at this?*

Probe implications and consequences

The argument that they give may have logical implications that can be forecast. Do these make sense? Are they desirable?

- *Then what would happen?*
- *What are the consequences of that assumption?*
- *How could ... be used to ... ?*
- *What are the implications of ... ?*
- *How does ... affect ... ?*
- *How does ... fit with what we learned before?*
- *Why is ... important?*
- *What is the best ... ? Why?*

Questions about the question

And you can also get reflexive about the whole thing, turning the question in on itself. Use their attack against themselves. Bounce the ball back into their court, etc.

- *What was the point of asking that question?*
- *Why do you think I asked this question?*

Questioning to promote metacognition

Reading*

- ❑ What strategies do I use before I read or view? How do these help me understand the text?
- ❑ How do I activate my prior knowledge and experiences?
- ❑ How do I help myself recall information?
- ❑ Can I select the important details?
- ❑ Do I reread or review? When? Why?
- ❑ What can I do if I am confused?
- ❑ Do I connect my own experiences to what I read?
- ❑ When is it appropriate to skim or scan?
- ❑ How does it help me to skim or scan?
- ❑ Who is represented in this text?
- ❑ Whose voice is missing?
- ❑ Is the information current and accurate?
- ❑ Do I need to seek another perspective?
- ❑ What is the author's/creator's intent?
- ❑ What does this text mean to me?
- ❑ How do I figure out the meaning of the text?

Questioning Models

Using questioning models enables the teacher and the student to classify types of questions in various ways. A model can then be utilised by the student and the teacher to formulate questions. Below you will find information about a range of questioning models that can be used to support comprehension strategy instruction.

Many of the questioning models are closely linked. Here is my interpretation of some of the similarities across some of the more commonly used models. Each of these models is elaborated upon further.

QAR	On, Between & Beyond	Here, Hidden, Head	Bloom's Taxonomy	
Right there	On the Lines	Here questions	Knowledge, Comprehension	Literal
Think & Search	Between the Lines	Hidden questions	Application , Analysis	Inferential
Reader & Author	Beyond the Lines	Head questions	Synthesis	Inferential &
On my Own	Beyond the Lines	Head questions	Evaluation	Evaluative

QAR – Question Answer Relationships

There are four key types of questions:

- "Right there" questions (text explicit). These are literal questions where the answer is in the text itself. Students are asked to respond at the literal level. These questions usually begin with words such as: who is, where is, list, what is, how many, when did, name, what kind of, etc.

- "Think and search" questions (text implicit). The answer is implicit in the text but the student must synthesize, infer, or summarize to find the answer. Think and search questions tend to be more open-ended without set answers. Students are asked to think about how the information in the text relates to other ideas. They must synthesize, infer, or summarize to find the answer. These questions tend to be more open-ended, and usually begin with words such as: what caused, contrast, retell, how did, explain, find examples, for what reason, compare, etc.

- "Reader and author" questions (text implicit or experience-based). The answer needs the reader to combine his or her own experiences with what the text states, i.e., the knowledge presented by the author. Students are required to have read the material to understand what the question is asking. They must combine their own experiences with what the text states. These questions are very specific to the content of the particular text: Do you think that cloning is worth continuing the research funding?

- "On my own" questions (text implicit or experience-based). Students are able to answer these questions on their own without reading the text. They must generate the answer from their prior knowledge. The answer might be changed after reading the text: What did you know about cloning before reading the text?

These questions are sometimes referred to as:

- **On the lines** questions – the author said it
- **Between the lines** questions- the author meant it
- **Beyond the lines** questions – the author would agree with it (reader and author)

> Right there

> Think and Search

> Reader and author

All of the questioning models tend to move from lower order to higher order thinking.

Bloom's Taxonomy (Revised)
http://www.apa.org/ed/new_blooms.html

Based on an APA adaptation of Anderson, L.W. & Krathwohl, D.R. (Eds.) (2001)
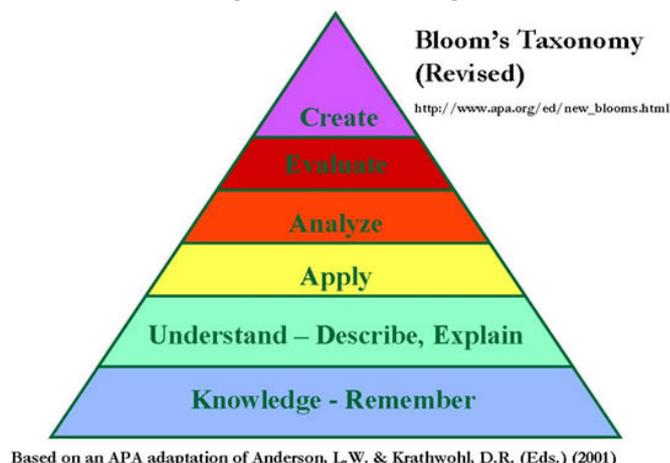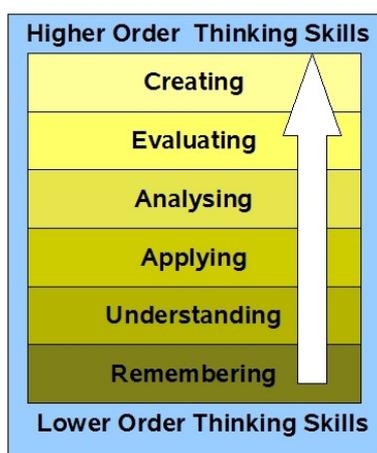
Question Answer Relationships - 4 Types of Questions

In the Book QAR's

RIGHT THERE
The answer is in the text, and is usually easy to find. The words used to make up the question and words used to answer the questions are RIGHT THERE in the same sentence.
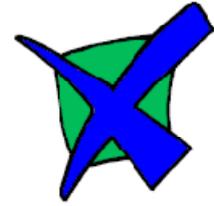
THINK and SEARCH (Putting it Together)
The answer is in the selection, but you need to put together different pieces of information to find it. Words for the question and words for the answer are not found in the same sentence. They come from different places in the selection

In your head QAR's

AUTHOR and YOU
The answer is NOT in the story. You need to think about what you already know (your background knowledge), what the author tells you in the text and how it fits together.

ON MY OWN
The answer is not in the text. You can even answer the question without reading the selection. You need to use your own experience. Teachers ask this type of question to bring out your prior or background knowledge.

ON THE LINES

The answer is right HERE!
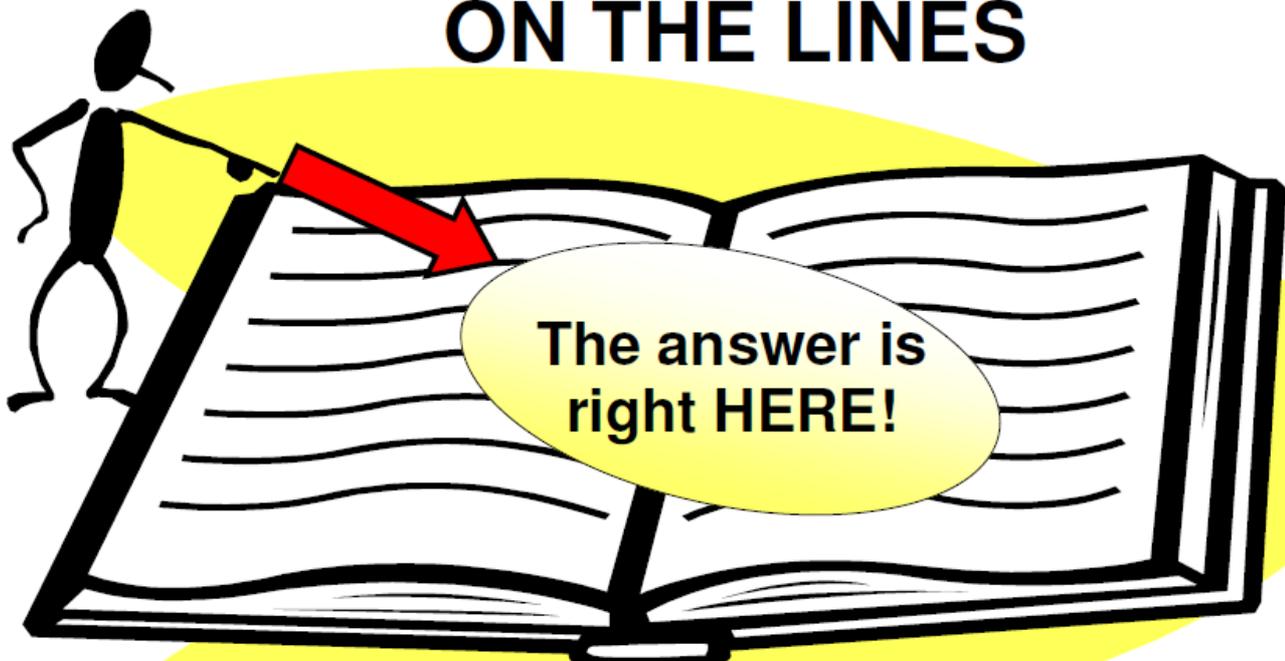
Literal Level

The author said it.

BETWEEN THE LINES

Search for Clues

**Inferential
Interpretive Level**

The author meant it.

BEYOND THE LINES

**Making connections
beyond and back
to the text.**

**Evaluative
Applied
Critical Level**

The author would agree with it.
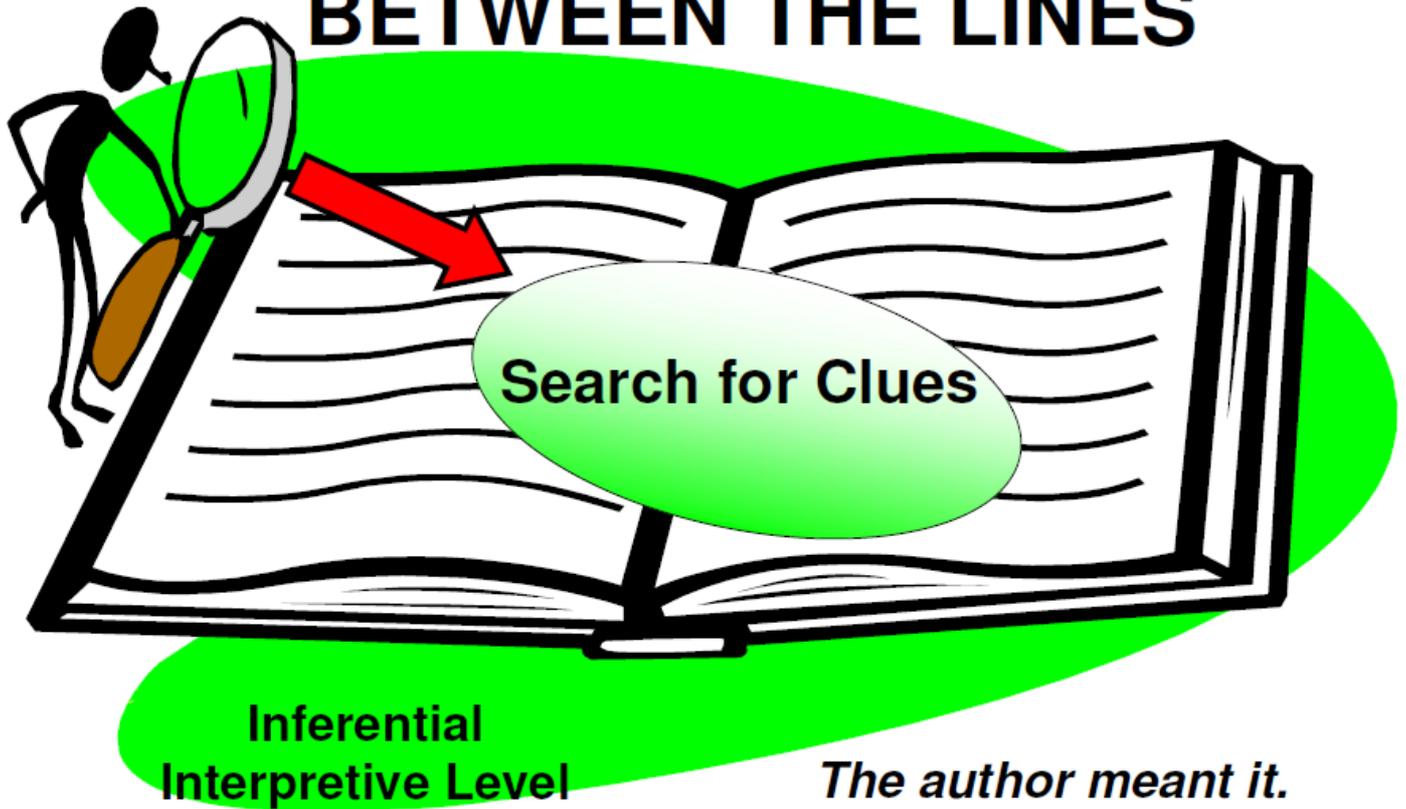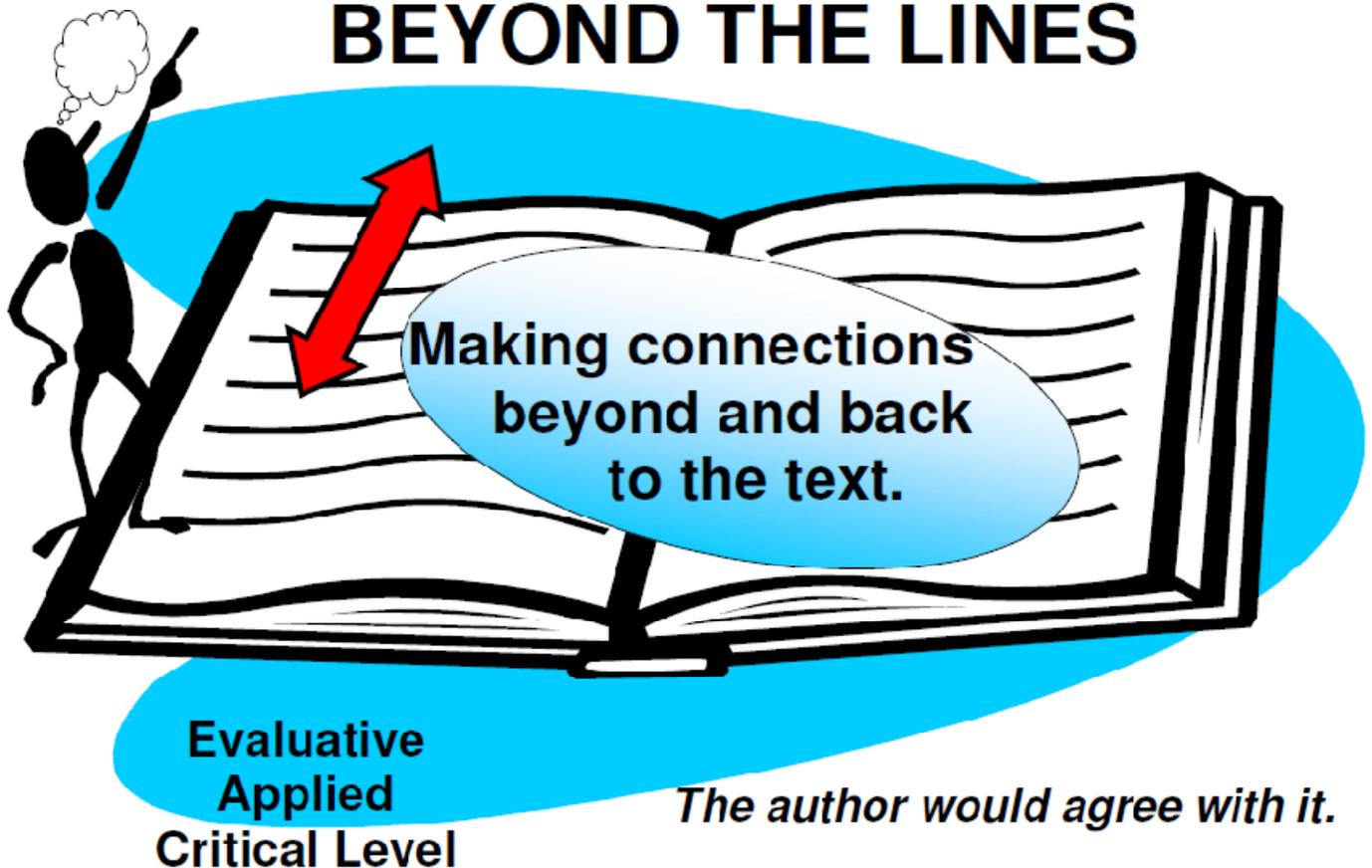
Here Questions

'Here Questions' are those where you can go to a place in the text and place your finger on the answer i.e. 'Here is the answer'

- Put your finger on the sentence where...
- What colour is...?
- What did (character) do when...?
- Who...(action) ?
- When did... (action happen) ?
- Where did / does (an action occur)?
- Where did / does (object) come from?
- Where did / does (character) come from?
- How many...?
- How much...?
- List 5...
- List the names of the main characters
- What happened at the beginning of the text?

- What happened next?
- What happened after that?
- What happened at the end of the text?
- What happened after (action)?
- What happened after (character) spoke these words (words spoken)?

The Answer is Here!

Here Questions

Have your students make up questions to go with these question stems.

- What happened when (character) (action)?
- What happened just before (action)?
- Where did (character) go after (action)?
- What did (character) do when (action)?
- What was (object) used for?
- Where is (object) located?
- What were (objects) used for?
- Who spoke to (character) at (place)?
- Who spoke the words (quote)?
- Where did (character) keep...?
- Where in the text does it say (quote)?
- List 3 things (character) did at (location)
- What character… (did particular action)? (was verb)?
- Tell me who showed (an emotion)
- Tell me who thought (outline thought)
- Find the words that the author has used to describe smell.
- Find the words that the author has used to describe how something feels.
- Find the words that the author has used to describe how something tastes.

The Answer is Here!

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Hidden Questions

Working Out Word Meaning from Clues in Text

- Have a guess at the meaning of '.....*word*.....' Use the clues given in the text before this word & in the next one or two sentences.

- I wonder what this word could mean? *(Take an 'educated guess')* What clues from the text support this inference?

- We can assume '.....*word*.....' means *(insert meaning)* because …

- We can conclude that '.....*word*.....' means *(insert meaning)* because of what clues from the text?

- How do you know that '…*word*…' means *(insert meaning)*?

- In this sentence the word *(insert word)* most likely means...

    a)
    b)
    c)
        because...

- What could the word *(insert meaning)* mean given that *(action)* & *(action)* have happened.

- Show me the part of the text that leads you to infer this word means *(insert meaning)*.

BECOME A 'WORD DETECTIVE'!

Use Clues in the Text & Your Head!

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Hidden Questions

- What clues in the text lead you to make this inference?

- *(Insert word)* has three meanings in the dictionary. Which is the most appropriate meaning here?

- From the 'contextual clues' *(hints in the text)* what could *(insert word)* mean?

Huge Hint!!! Read past the word to get more clues!!!

- What clues point you to a possible meaning for this word?

- I feel that there isn't enough information here to predict the meaning of this word. Would you agree? What is our next course of action?

- Is it crucial that we understand the meaning of this word? Why?

- Will I lose a significant amount of meaning from the text if I don't know this word?

- Substitute a similar word & see if the sentence makes sense i.e. use a synonym for the unknown word.

AN 'INFERENCE' IS NOT STATED BUT HIGHLY LIKELY

Use Clues in the Text & Your Head!

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Head Questions

Have your students make up questions to go with these question stems.

Focus on Character

- What do you think motivates (character) in (situation)?
- Did (character's) motives change throughout the text? How?
- Do you think (character) should have...? Why or why not?
- If you are a TV reporter, what questions would you ask (character)?
- What did (character) mean by the expression ('...........................')
- (Character) believes... What is the counter argument to this view?
- If you were (character) what would you have said to (other character) when (incident occurred)?
- What can you learn from this author about character development?
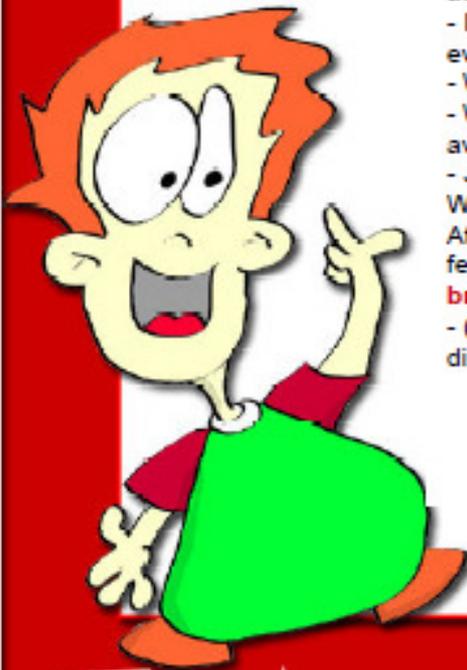
- If I where (character) I would have (describe your action) when (action from story)
- I wonder if (character) (felt emotion) when (action or event)? - *Students fill this one in.*
- What caused (character) to (behaviour)?
- What else could (character) have tried to (solve or avoid complication)?
- Just suppose (character) had not done (action). What would have happened differently in the story?
At (position in story) how do you think the character feels - **(rise above the mundane) - 'sad' = heart broken = devastated**
- (character) said ('...........................') do you agree or disagree? Why or why not?

The Answer is in Your Head!

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Head Questions

Have your students make up questions to go with these question stems.

Focus on Character

- Why do you think (character acted... in this situation)?
- Why do you think (event happened)?
- List five ways (character) and (character) are alike?
- List five ways (character) and (character) are different?
- How is (character) similar to (character)?
- How are (character) & (character) dissimilar to each other?
- What do you think would have happened differently if (change a character's thought or reaction)?
- If (change a character's personality) how might the story have developed differently?
- What might have prevented (problem from text) happening?
- What are the strengths of (character)?

- What are the weaknesses of (character)?
- What vulnerabilities does (character) have?
- Would you rather be (character) or (character)? Why?
- What do you think (character) meant where he/she said ('...phrase...')
- What would your parents say to you if you came home raving about (character from story) who (characteristic of character)?
- Do you agree with (positive or negative statement about a character)? Why? Be prepared to share your reasons.
- Is (character) a hero? Read (passage from text). - How could this section of text change a person's mind?
- Was (character) a villain? Read (passage from text). How could this text change a person's mind?
- What were (character's) motives (at point in text)?

The Answer is in Your Head!

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Questioning for Higher Order Thinking

Bloom's Taxonomy

Bloom's Taxonomy is a model of classifying thinking according to six cognitive levels of complexity. Fundamentally, the levels have been described as a stairway, leading many teachers to encourage their students to attempt to achieve a higher level of thought. The lowest levels are: knowledge, comprehension, and application. The highest levels are: analysis, synthesis, and evaluation. The taxonomy is hierarchical; each level is included in the higher levels. In other words, a student functioning at the 'application' level is assumed to have mastered the material at the 'knowledge' and 'comprehension' levels." This organization lends to a natural division of lower and higher level thinking.
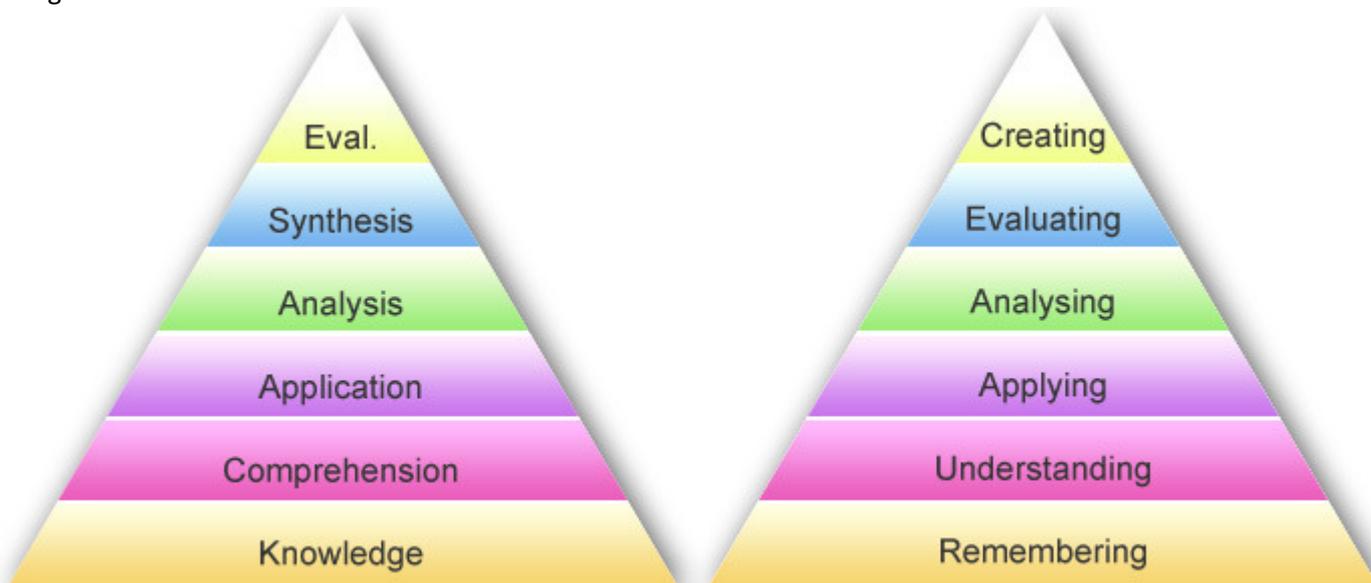

Revised Bloom's Taxonomy (RBT)

During the 1990's, a former student of Bloom's, Lorin Anderson, led a new assembly which met for the purpose of updating the taxonomy, hoping to add relevance for 21st century students and teachers (Forehand, 2005).
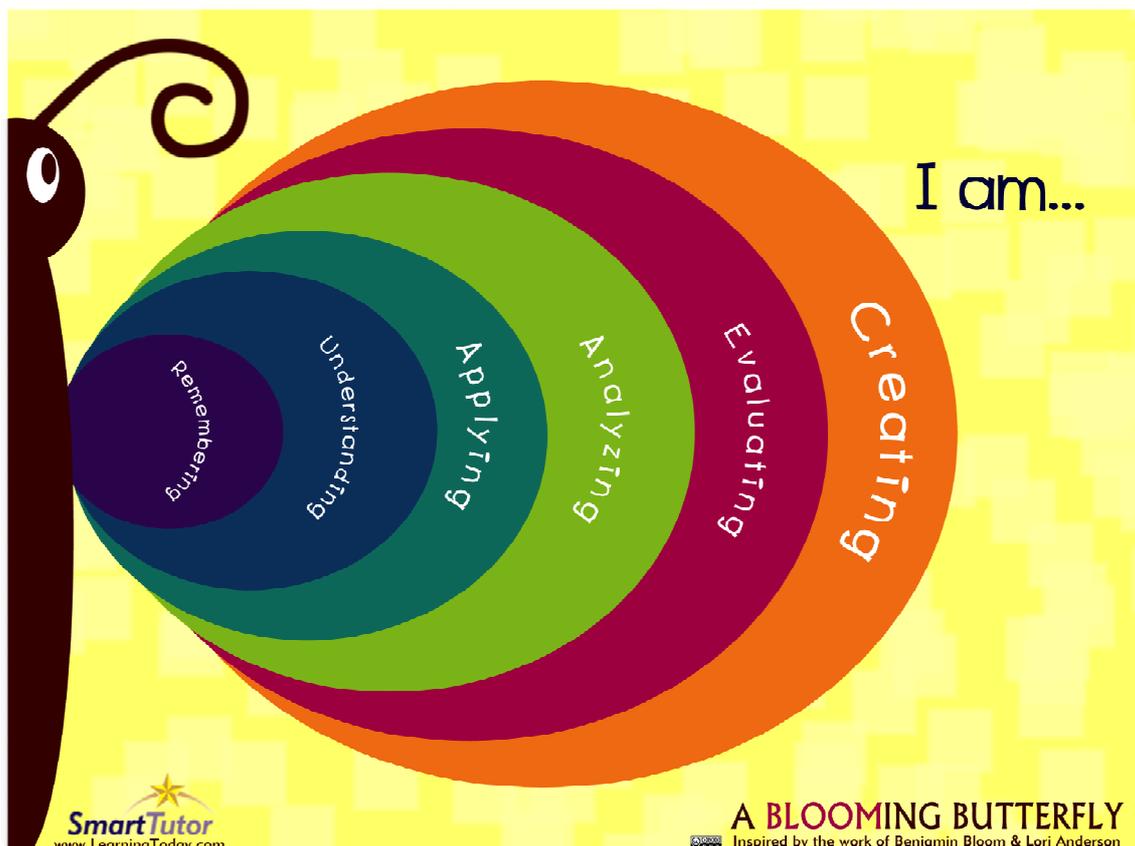
The following should help you develop ideas for questions to ask during the read-aloud session to students

Knowledge

- Who?
- What?
- When?
- Where?
- How?
- List the facts in order.

Comprehension

- What is meant by... ?
- Can you describe... ?
- What is the difference... ?
- What is the main idea... ?
- Why did... ?
- Explain why... ?

Application

- Who would you choose...?
- What would happen if...?
- How would you...?
- Do you know someone like...?
- Would you do the same thing in the same situation...?
- If you had to...what would you do?

Analysis

- What part of the reading was funniest?
- What part was the most exciting?
- What part was the saddest?
- Tell some things that could not have happened in real life.
- Which things were fact, and which were opinions?
- What could you do that was just like what the person in the story did?
- Find five words in the story which begin with the same sound.
- List five compound words from the story.
- What was the purpose of...?

Synthesis

- Retell one event from an animal's point of view.
- How could we/you...?
- Make up another ending to the story that still fits the details.
- Rewrite a sentence from the reading but change one thing in it.
- Write a new title for this story.

Evaluation

- Was the main character in this reading good or bad? Why?
- Which is better...?
- Would you agree that...?
- What is your opinion of...?
- Were they right to do...? Why? Or why not?
- Compare two characters in the reading. Tell which one you think is better and why.

Skills that are important for comprehension

1. Understand the words -- comprehend what the words mean
2. Find facts and details -- seek one or more pieces of information in the text
3. Find main ideas -- from the whole content, prioritize the overriding (primary) theme or idea
4. Figure out the sequence -- tell the order of events
5. Find cause-effect -- see how one person, action, or event triggers another;
    also, identify the "who" or "what" that occurs
6. Make inferences -- develop ideas or images based on what is read in the text but not stated
7. Generalize -- discern the relationship between single events and the larger situation or other events
8. Identify tone/mood -- sense how the author was feeling and how he wanted the reader to feel while reading
9. Identify "theme" -- see the "big picture" moral or abstract idea
10. Identify characterization -- comprehend what makes characters act as they do
11. Distinguish fact from fiction -- sort out what is real and what is part of the imaginary world created by the author
12. Find bias or propaganda -- notice obvious or hidden bias

In reviewing these individual skills of comprehension in light of Bloom's Taxonomy, it is quickly seen that many comprehension skills require higher-order thinking and an ability to view the material that has been read from an abstract perspective.

Question Frames for Developing Higher-Level Questions

Recall:
What is _____?
Define _____.
Identify the _____.
Who did _____?

Analysis:
What is the main idea of _____?
List the main events of _____.
What are the parts of _____?
What is the topic of _____?

Comparison:
What is the difference between _____and _____?

Inference:
What do you think will happen next in the _____?
What is the main conclusion from _____?
Predict what _____ will do.
What would happen if _____?

Evaluation:
What is your opinion of _____?
What is the best solution to the problem of _____?
Evaluate the writing of _____.
Defend your opinion about _____.

Question Stems
Why was …….?
How did ……….feel about……….?
What caused ……….. to ……….?
When ………… happened, why did ……………?
In this story, what does …………. mean?
From the story, how might …………… be described?
Why did the author …………..?
How might the story have ended differently?
Why was …………?
What do you think will happen next?
How would you have felt if you were …………..?
Why do you think that ………… did …………..?

I think that this really means…

I know another time…

I know what is going to happen next…

This reminds me of…

Can this be right?

I predict that…

In other words?
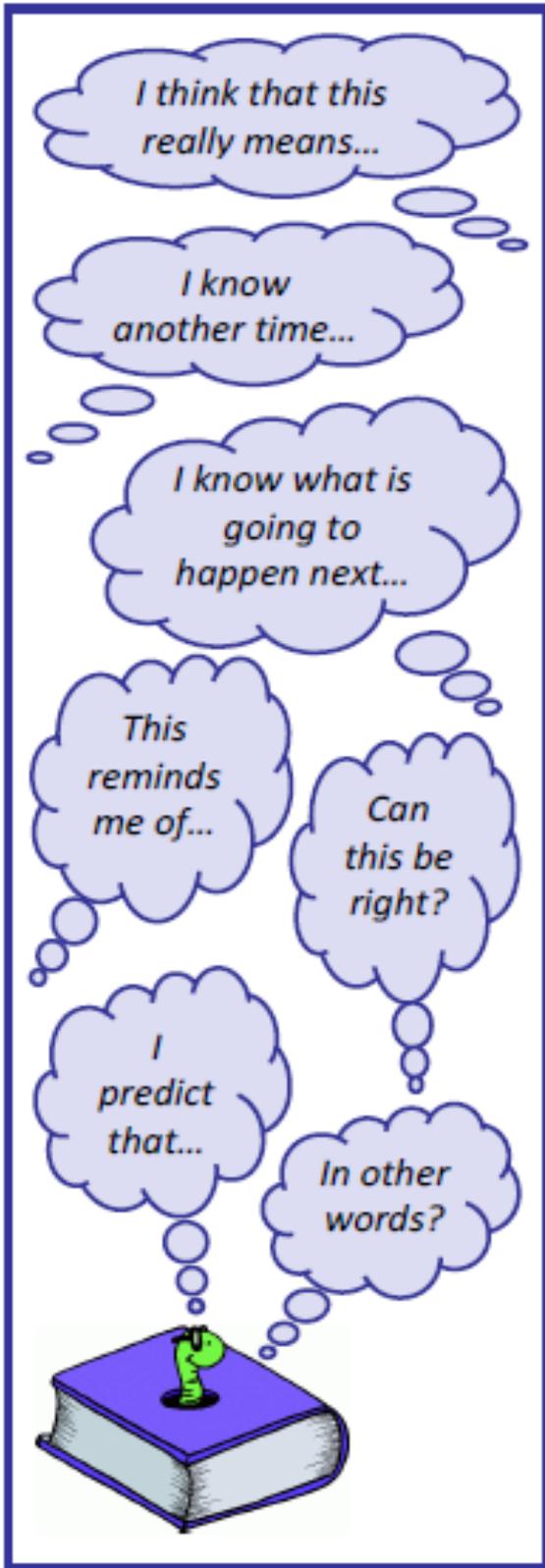
Question Bookmark

Questioning for Deeper Thinking

Knowledge – Recall of information
Who, what, when, where, how
_____?
Describe
_____.
Locate _____ in the text.

Comprehension – Organization and selection of ideas and facts
Retell _____ in your own words.
What is the main idea of _____?
What is the author's purpose for writing?

Application – Use of the facts and ideas
How is _____ an example of _____?
How is _____ related to _____?
Why is _____ important?

Analysis – Separation of the whole topic into parts
What are the parts that make up _____?
Classify _____ according to _____.
How does _____ compare/contrast with _____?
What evidence can you list for _____?

Synthesis – Putting the ideas together to form something new
What would you predict from _____?
What ideas can you add to _____?
How would you design/create a new _____?
What could happen if you combined _____ with _____?
What solutions could you suggest for _____?

Evaluation – Developing opinions, forming judgments, or making decisions
Do you concur with _____?
What is your opinion on _____?
What is the most important _____?
What decision did you make about _____ and why?
What criteria would you use to evaluate _____?

Question Matrix / Q-Matrix

The question Matrix was developed by Chuck Wiederhold as a user friendly way of using Bloom's Taxonomy. The questions progress from lower to higher order thinking.

Least Complex →
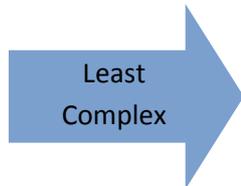
| Category	Event	Situation	Choice	Person	Reason	Means
Present	What Is?	Where/ When Is?	Which Is?	Who Is?	Why Is?	How Is?
Past	What Did?	Where/ When Did?	Which Did?	Who Did?	Why Did?	How Did?
Possibility	What Can?	Where/ When Can?	Which Can?	Who Can?	Why Can?	How Can?
Probability	What Would?	Where/ When Would?	Which Would?	Who Would?	Why Would?	How Would?
Prediction	What Will?	Where/ When Will?	Which Will?	Who Will?	Why Will?	How Will?
Imagination	What Might?	Where/ When Might?	Which Might?	Who Might?	Why Might?	How Might?

← **Most Complex**
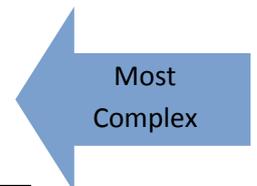
	is	did	can	would	will	might
Who						
What						
Where						
When						
How						
Why						

The question stems in the matrix can be used in a variety of ways. Have students use the question stems in the Q-matrix to develop their own questions. The simplest form of question is in the upper left, such as "Who is the main character?" The more complex the question, the further it moves down and the further it moves right so that the most complex questions are in the bottom right-hand corner. For instance, "How might Jesse have felt when Leslie gave him the paint set?" (*Bridge to Terabithia*) or "Why will the society return to books?" (*The Last Book in the Universe*).

Once students are comfortable developing various levels of questions, have them first develop a question using the matrix and then revise the question using a verb from Bloom's taxonomy (e.g., explain, compare, analyze, evaluate). This step-by-step approach will provide the scaffolding that some students need in order to develop their own questions.

The following resources can be used and adapted to support students to develop their own comprehension questions.

What	When	Where	Who	Why
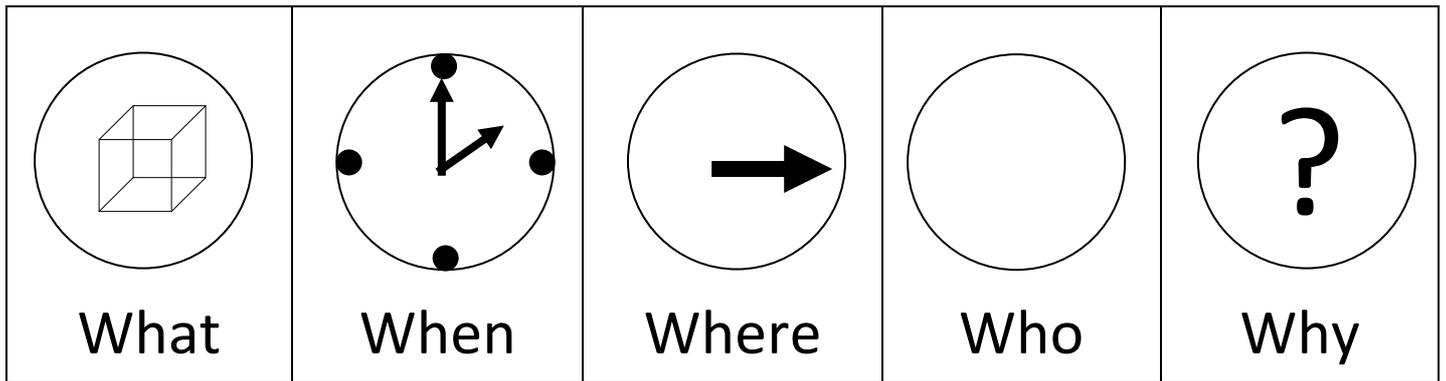
Q-Chart	who	what	when	where	why	how
did						
can						
will						
might						
would						
is/are						

Why?

Who?   **What?**   **When?**

Where?

How?

Question Matrix Questions

Is / are?

might?

can?

will?

would?

did?

Connections & Questions

Connect to self

Connect to text

Connect to world

Right there question

Think & search question

Author and you question

Higher Order Question Prompts

Describe it

**Analyse it**   **Compare it**   **Connect it**

Apply it

Argue for or against it

Make Your Own
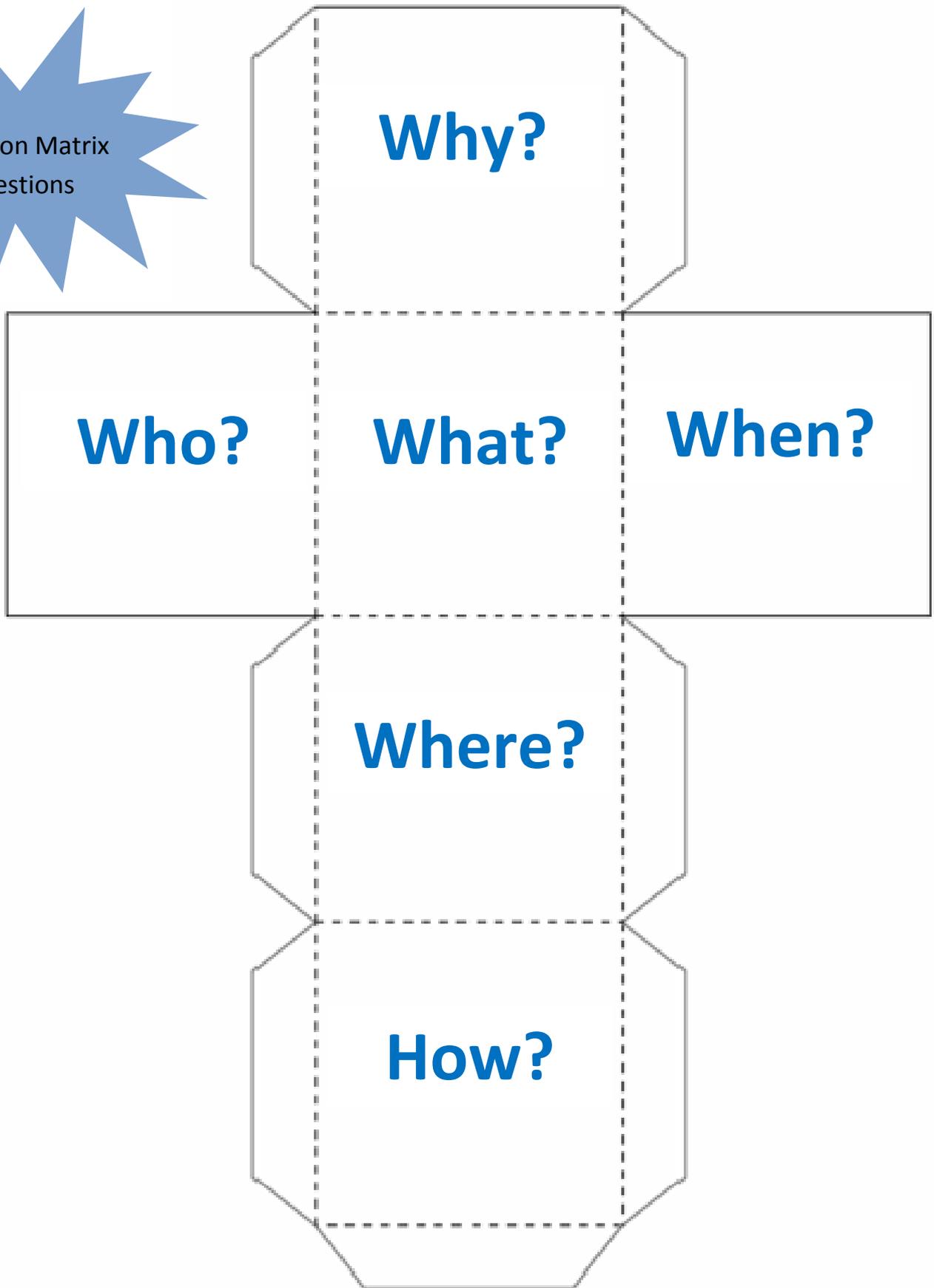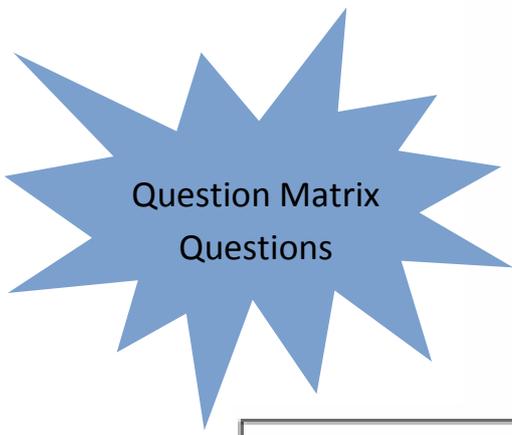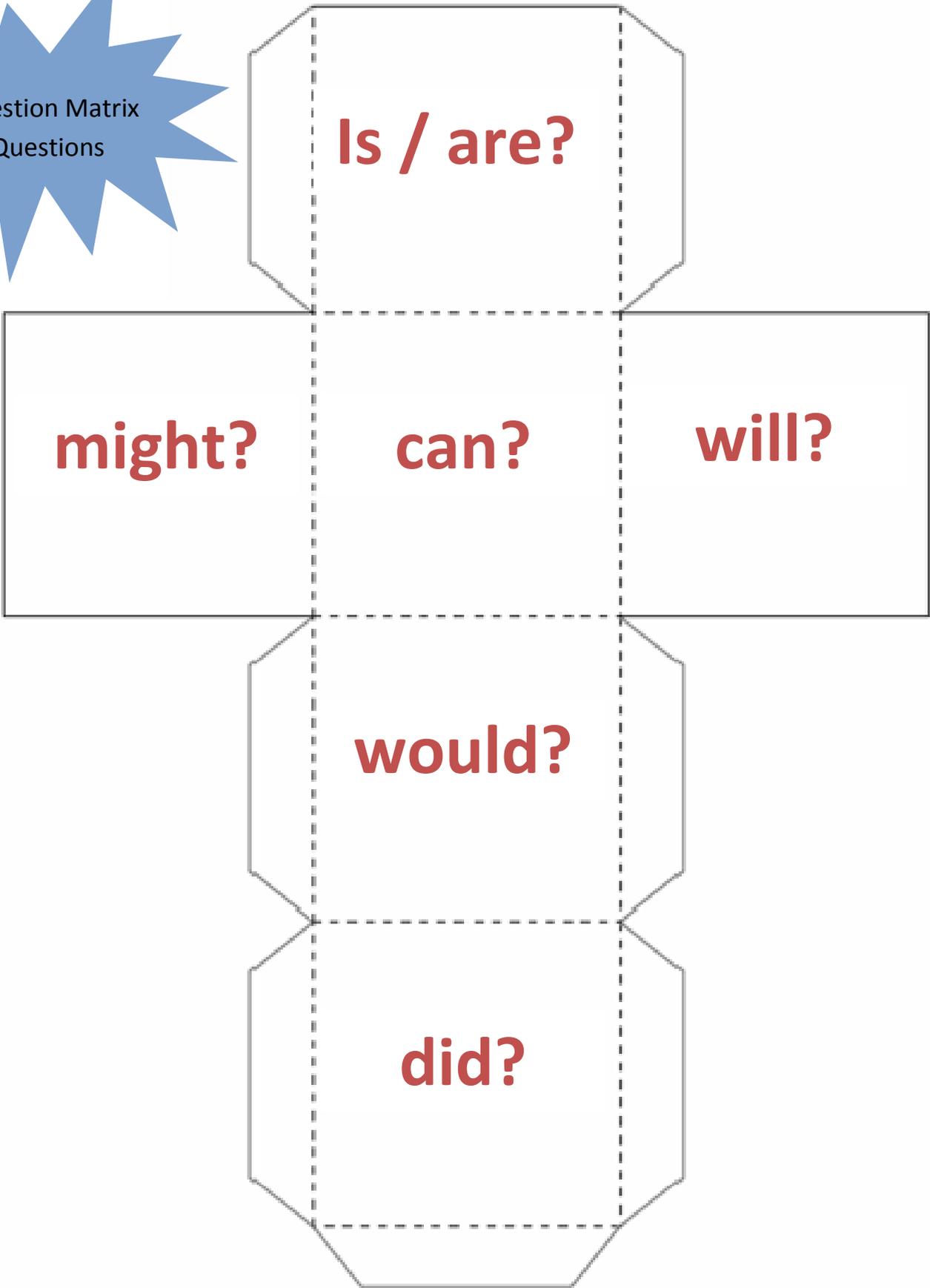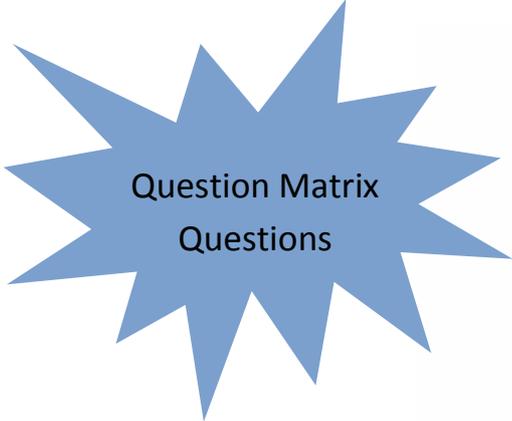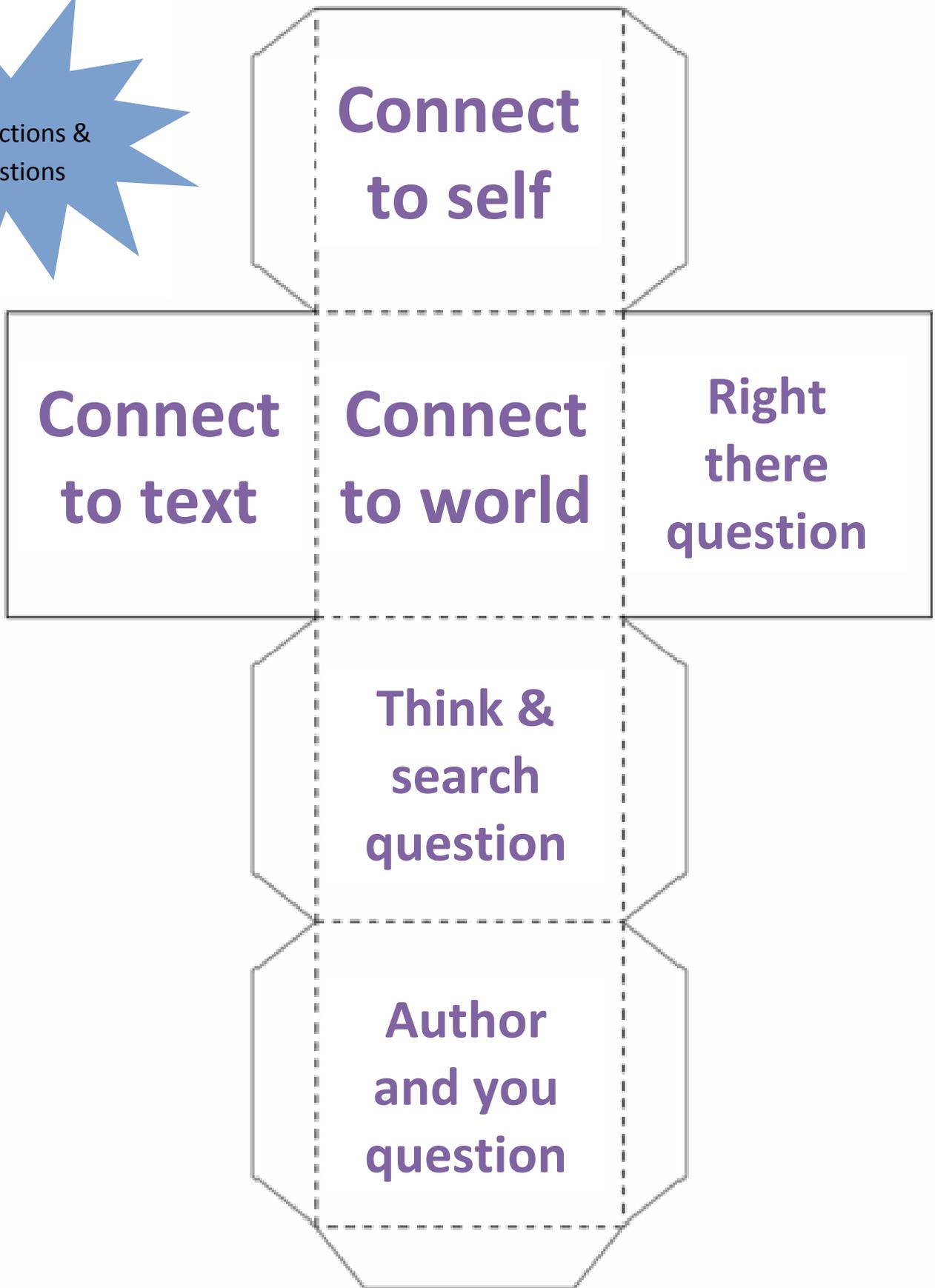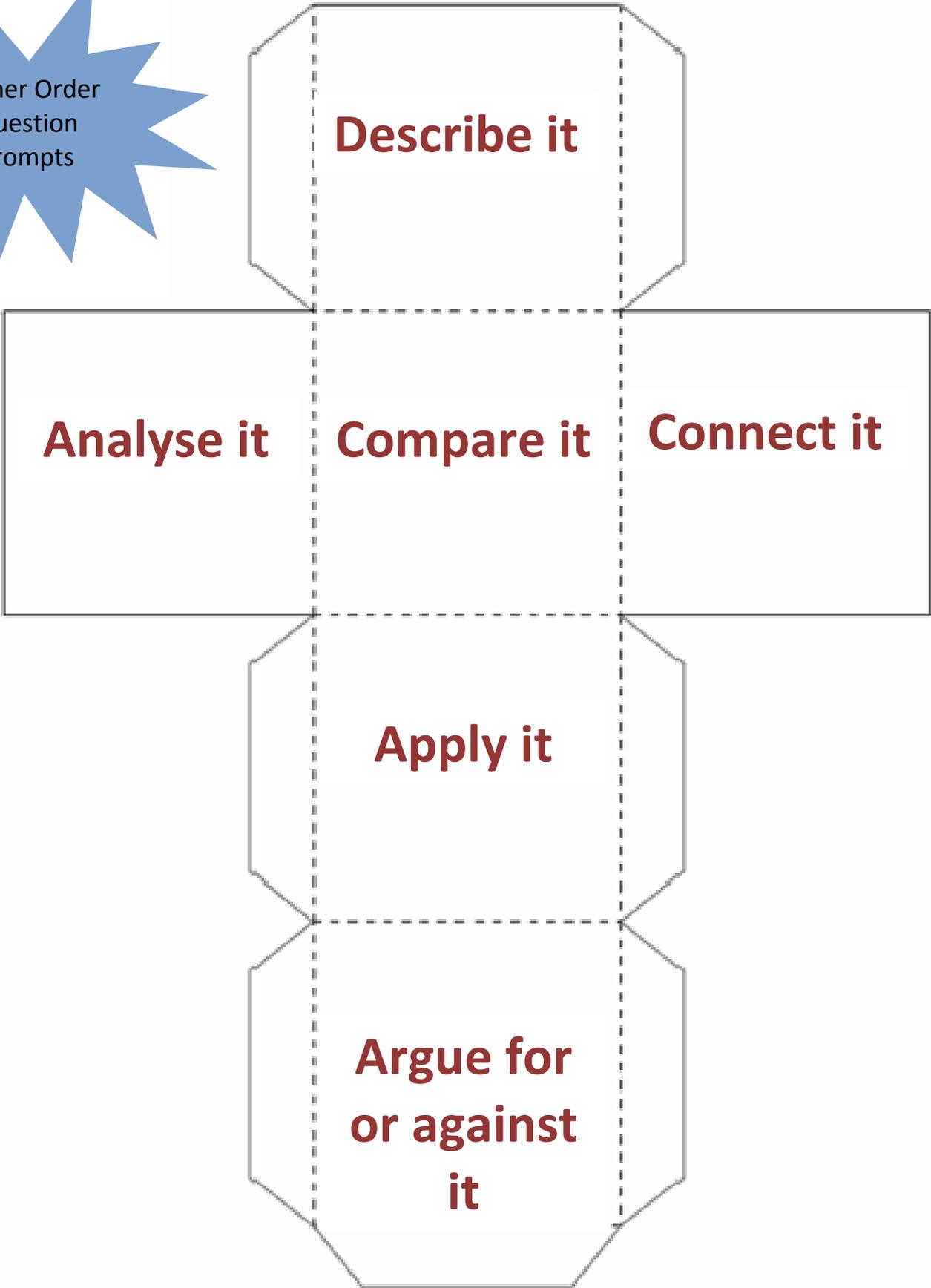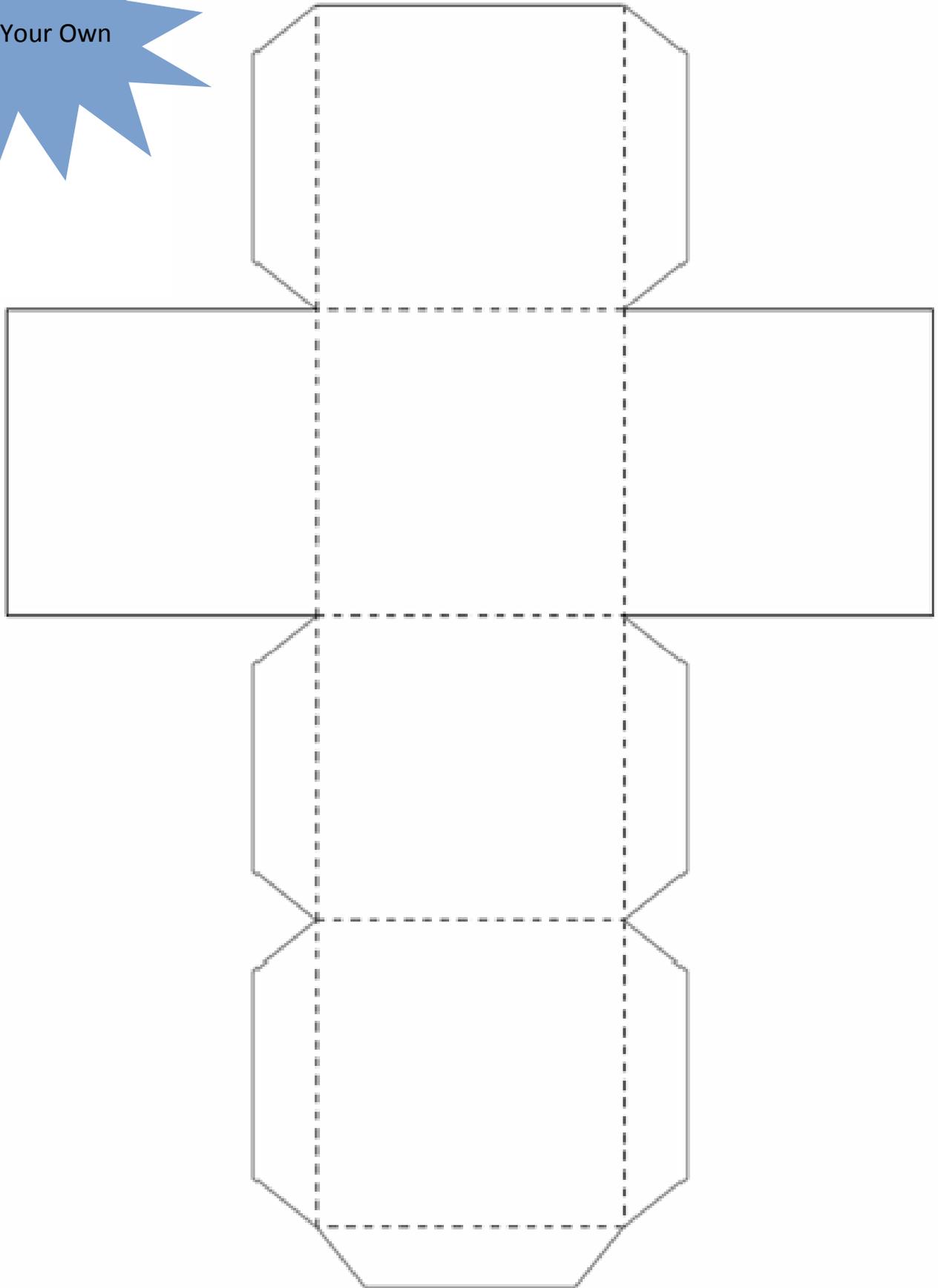
COLLABORATIVE QUESTIONS

Directions: Once you have read and annotated a text, formulate questions about what you have read. Consider the types of questions you are posing about the text and try to categorize them (e.g., knowledge, comprehension, application, analysis, synthesis, evaluation). Once you have posed a variety of questions about the text, you will share your questions with a partner and attempt to answer each other's questions; use the space provided to take notes on your answers to each question.

	Your Questions About the Text	*Answers to Your Questions Based on Dialogue with your Partner*
KNOWLEDGE		
COMPREHENSION		
APPLICATION		
ANALYSIS		
SYNTHESIS		
EVALUATION		