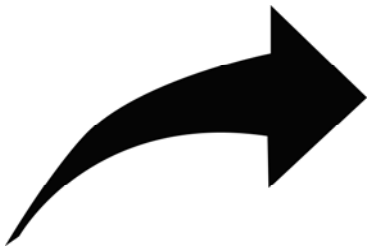
Organize ISAT Progress



EXPAND THINKING

reading = thinking

math = thinking with numbers

science = thinking with patterns

writing = thinking on paper

ISAT = thinking independently

Center for Urban Education

All the resources in this Toolkit are posted at http://teacher.depaul.edu.

Contents

ACTION PLAN

1: CLARIFY PRIORITIES
How will you set grade-level priorities?

2. Strengthen Teaching
A. Which kinds of learning activities will you emphasize during November-February?

- ○ students make up multiple-choice questions
- ○ students write "extended responses"
- ○ students outline what they read
- ○ students outline and write about relevant and familiar topics—the school, the community, the city, the inauguration, Black History
- ○ Use the Benchmark test to "simulate" ISAT—analyze the test with students after they complete it.
- ○ Weekly math "connections"—teachers involve students in revisiting skills once each week

- ○ _____

B. What will your staff development focus on?

3. Align Extended Learning
How will you coordinate extended learning activities to support this progress?

- ○ literacy teacher and math teacher will work with extended learning staff
- ○ extended learning staff will participate in grade-level meetings
- ○ extended learning staff will participate in January 23rd professional development
- ○ extended learning and school staff will conduct parent workshops
- ○ _____
- ○ _____

Grade level/cycle meetings will focus on _____.

_____ will facilitate those meetings.

4. CHECK
How will you formatively evaluate staff development to identify ways to support implementation?

What will you collect?

What will you observe?

5. Parent Connections
How will you involve parents in ISAT Progress?

- ○ Grade level parent meetings
- ○ Parent ISAT Success "kits"
- ○ Newsletters
- ○ Parent Workshop (in collaboration with community agency)
- ○ ISAT-relevant parent-friendly homework
- ○ _____

School Action Plan for ISAT Success

December

Goal	Action	Who and When

January

Goal	Action	Who and When

February

Goal	Action	Who and When

STANDARD CALENDAR Second Quarter

Week of	ISAT Success Priorities
November 9 *Wed. 11/11, Veterans Day*	
November 16 *Report Card Pickup, 11/18*	
November 23 *Thanksgiving*	
November 30 *Fri. 12/4 Staff Development*	
December 7	How will you prepare for Winter Break?
December 14	Progress Reports, 12/16

Winter Break December 21 through January 1

January 4	
January 11 7th-8th grade writing test—persuasive prompt	Benchmark Tests 7th and 8th Grade District Writing Prompt (Persuasive)
January *18* *Dr. King's Birthday*	
January 25 *Fri. 1/29 Professional Development*	

Third Quarter -- 9 weeks

Week of	ISAT Success Priorities
February 1 *Report Card Distribution, 2/3*	How will you relate learning about Black History to ISAT progress?
February 8 *Thursday 2/11, Staff Development* *Friday 2/12 Lincoln's Birthday*	
February *15* *Presidents Day*	How will you relate Presidents Day to ISAT progress?
February 22	
March 1 *Pulaski Day*	***ISAT***
March 8 Progress Reports, 3/10	***ISAT***
March 15	
March 22 *Friday, 3/26, Professional Development*	8th Grade District Wide Writing Assessment (DWWA)

Spring Break ***March 29 through April 2***

April 5 *Friday, 4/9, Prof Dev*	

Involve Parents to Expand ISAT Reading Success

ISAT includes reading tests for all students in grades 3-8.
One way to help your child succeed is to ask your child questions about what they read. Tell them to **write their answers** to the questions you ask. Then discuss them.

Questions to ask after your child reads a story—or watches a television show.
> Who is your favorite character? Why do you like that person best?
> What choice did one character make? Why? What happened because of that choice?
> What do you think people can learn from this story?

Questions to ask after your child reads about history or science—or watches a TV program.
> What were the most important facts you learned? Make a list.
> What do you think a good title for this report would be? Look at your list.
> For a topic about the environment: What would you tell people to do based on this report?
> For a history topic: What lesson can people learn today from this history?

Ask other questions that you think of as you watch TV or read with your child.
This is a good way to help children think and learn more any time—not just for ISAT.

In recognition of Black History Month, watch a TV program or read a biography or history, and ask your child to write an answer to this question:
What is the legacy of this African American leader?

ISAT Math Progress

Students in grades 3-8 take ISAT math tests.

To help your child succeed on the ISAT math test and every day in school, practice math "facts".
Students need to know the times tables. Work with one number each day, from 2-12, for 11 days. Practice with lists or cards—put the multiplication on one side, the answer on the other. Then mix up the cards and ask your child to tell the answer. Turn this into a game. Have your children draw the multiplication problem from a pile of problems. The first child who gets the answer correct keeps the card.

Students will write about how they solve problems. Help them practice that, too.
> Give them a problem to solve.
> Then ask them to write out how they solved it.
> Then ask them to explain why they solved it this way. For example, if they multiplied, why did they do that? They could have added. (The answer is that multiplication is a fast way to add a lot of numbers.)
This can be a family activity if your child explains the math to other children.
But it is very important that your child also write their ideas— for the test and to learn more.

Éxito en la Lectura ISAT

ISAT incluye exámenes de lectura para todos los estudiantes en grados 3-8.
Una forma de ayudar a su hijo a tener éxito es hacerle preguntas acerca de lo que leyeron. Dígales que **escriban sus respuestas** a las preguntas que usted hace. Entonces discútanlas.

Preguntas para hacer después que su hijo lee una historia—o ve un show de televisión.
> ¿Quién es tu personaje favorito? ¿Porqué te gusta mas esa persona?
> ¿Que elección hizo un personaje? ¿Porqué? ¿Que sucedió por esa elección?
> ¿Que piensas que la gente puede aprender de esta historia?

Preguntas para hacer después que su hijo lee sobre historia o ciencia—o ve un programa de TV.
> ¿Cuales fueron los más importantes hechos que aprendiste? Haz una lista.
> ¿Cuál piensas que sería un buen título para este reporte? Mira tu lista
> Para un tema acerca del medio ambiente:¿Qué le dirías a la gente que hacer basado en este reporte?
> Para un tema de historia: ¿Que lección puede la gente aprender hoy de esta historia?

Hacer otras preguntas de acuerdo a lo que usted ve en TV o lee con su hijo.
Esta es una forma de ayudar a los niños a pensar y aprender mas en cualquier momento—no solo para ISAT.

En reconocimiento del Mes de la Historia Afro Americana (Black History Month), Vea un programa de TV o lea una biografía o historia, y pida a su hijo escribir una respuesta a esta pregunta: *¿Cual es el Legado de este líder Afro Americano?*

Progreso Matemático ISAT

Estudiantes en grados 3-8 toman exámenes ISAT de matemáticas.

Para ayudar a su hijo a tener éxito en el examen ISAT de matemáticas y todos los días en la escuela, practique “hechos” matemáticos.
Los estudiantes necesitan saber las tablas de multiplicar. Trabajar con un numero diario, del 2-12, por 11 días. Practique con listas o tarjetas—ponga la multiplicación en un lado, la respuesta en el otro. Entonces mezcle las tarjetas y pida a su hijo decir la respuesta. Convierta esto en un juego. Haga que sus hijos extraigan un problema de multiplicación de un montón de tarjetas con problemas. El primero que tenga la respuesta correcta se queda con la tarjeta.

Los estudiantes escribirán acerca de como resuelven problemas. Ayúdelos a practicar eso también.
> Deles un problema para resolver.
> Entonces pídales que escriban como lo resolvieron.
> después pídales que expliquen porqué lo resolvieron de esta forma. Por ejemplo, si multiplicaron, porqué hicieron eso. Podrían haber sumado. (La respuesta es que la multiplicación es una forma más rápida de sumas muchos números.)
Esto puede ser una actividad familiar si su hijo explica las matemáticas a otros niños.
Pero es muy importante que su hijo también escriba sus ideas— para el examen y para aprender más.

Expand Reading Progress

How to develop students' reading strategies and skills…

Check the teaching strategies you will emphasize.

__model/read aloud and think aloud
__focus group with students needing specific guidance with this priority
__students write about what they read
__students use graphic organizers to analyze passages
__extended response
__ask open-ended questions modeled on ISAT and ask students to write their answers, then think, pair, share.
__add questions focusing on this priority to SCRMA
__students select and report on trade books

How will you make sure your students comprehend non-fiction?

How will you make sure that your students can respond to the challenging questions of the ISAT?

Reading PRIORITIES

The following information is from the Illinois State Board of Education.
You will find it and much more on the ISBE website, ISBE.net

Session 1	Sessions 2 and 3 (*One will be a pilot*)
• Six short passages: literary, informational, poems • 30 multiple-choice questions • SAT 10 questions	• Two passages • 10 multiple choice questions each • 1 extended response

Students across the state have difficulty with items that address these topics:

READING COMPETENCE	IMPORTANT FOR OUR GRADE
1. homonyms	
2. fable/folk tale/legend/myth/fairy tale/essay	
3. organizational patterns	
4. mood and tone	
5. point of view	
6. irony	
7. genre	
8. main idea	
9. information in charts/graphs	
10. inference	
11. elements of fiction	
12. author's message	
13. point of view	
14. type of writing	
15. character	
16. cause/effect	
17. fact/opinion	

Extended Response issues:

1. key ideas	
2. text references	
3. connections/conclusions	
4. extend	
5. balance	

How can I help my students read non-fiction? Have them analyze what they read as they read.

EXAMPLE: **Paragraph Reader/Page Reader** 1B: I can identify the main idea

- √ After you read each paragraph, make a note in the right box.
- √ Tell what is important in that paragraph.

George Washington Carver lived from 1864 to 1943. He spent much of his life helping farmers to use their land in better ways. His ideas have helped farmers in many countries around the world.	
Carver was in charge of farm research a Tuskegee Institute, a college in Alabama. He taught students how to farm. He also worked with southern farmers on their land. In the southern part of the United States, most farmers had grown cotton for so many years that the soil had worn out. Carver showed them how to improve the land.	
Carver said the farmers should plant peanuts. Peanuts would enrich the soil. Farmers asked who would buy so many peanuts if they planted them. Carver answered by finding more than 300 new ways to use peanuts. Farmers could feed the vines to farm animals. They could use the hulls for fertilizer. Carver even found a way to make paper from the peanut shells.	
When Carver died, he left his money to help people to keep working on farm research. Today, people from many countries come to the George Washington Carver Foundation at Tuskegee Institute. There they learn better ways of farming. Why is this important to the world today?	

What is the main idea of this passage?

INDEPENDENT **NON-FICTION READING GUIDE**

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Goal	Learn more about: _____
Read 1A, B, C	Read _____ *List the words you learn.* *List the information that is important.*
Organize 1B, 5A	Make a __list ___chart __timeline ___diagram to show what you learned.
Write and draw 3B	**Explain what you think about what you learned.** Write __ paragraph __ letter __ poem __essay __booklet Draw pictures to show what you learned.

How to Summarize a History

ILS1B: I can summarize information.

Topic of the Story: _____

What are the most important parts?

People: _____

*Place:*_____

What happens: _____

Draw a picture that shows the most important part of the history.

Write a summary. Tell: who is in it, where it happens, and what happens.

_____

_____

_____

_____

_____

_____

_____

How to Summarize

ILS1B: I can summarize what I read.

Topic: _____

List the "top ten" words that are part of what you read about it.

What are the two or three most important points you find in your reading?

_____

_____

_____

_____

Write a one-paragraph summary. Include the main points.

_____

_____

_____

_____

_____

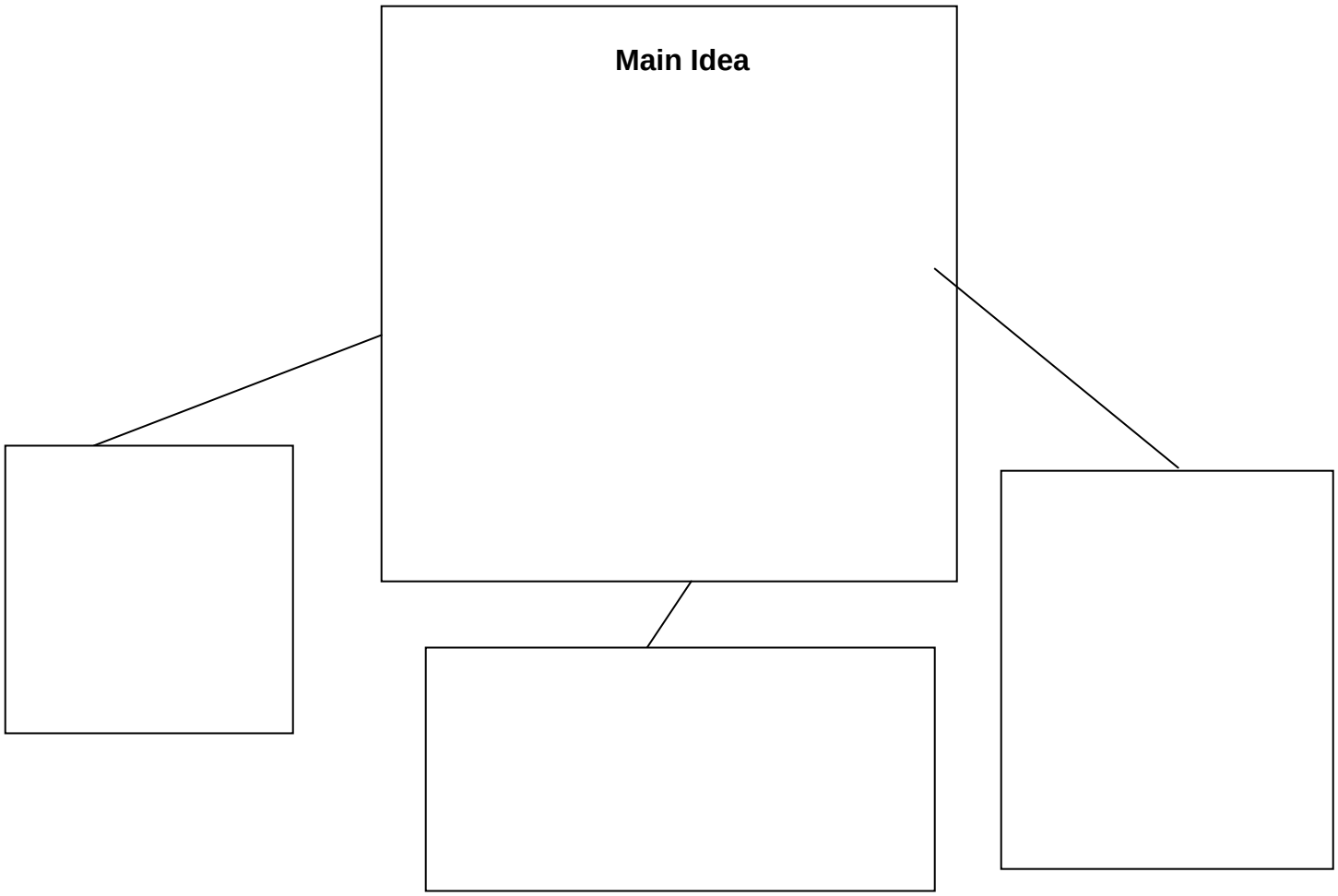
_____

_____

_____

I can infer the main idea. (1B)

Put the main idea in the big rectangle.
Then put information that supports it in the boxes below it.



This is how I figure out the main idea.

Inference Clarifier

ILS 1B: I can classify information; I can make and support inferences
Teachers can use this chart to see what students can do.

Category	**Literal** *Find information stated in the text.*	**Inference** *Make an educated guess*.
where: *characteristics of the place (setting)*		
who: *characteristics of a person*		
what: *an action by this person*		

Think More:

What's next?

Why do you make that prediction?

I can classify facts and opinions. (1B)
Put statements of facts in column 1 and statements of opinion in column 2.
If a text does not include opinions then the opinion column is blank.

These are facts I found in the text.	**These are opinions I found in the text.**

This is how to know if a statement is a fact.

This is how to tell if a statement is an opinion.

Which of these questions will I use?

Questions Based on ISAT samples.
Use these "stems" to prepare questions that get students to exercise thinking.

1A Apply word analysis and vocabulary skills to comprehend selections.

1. Which word best describes _____?
2. Which word in paragraph __ helps the reader know what _____ means?
3. What phrase means the opposite of _____ as used in paragraph _____?
4. What does the word _____mean in paragraph _____?

1B Apply reading strategies to improve understanding and fluency

1. What is paragraph x mainly about?
2. Which sentence from the selection best shows _____?
3. How can you best remember what this article is about?
4. How could a reader best determine _____?

1C Comprehend a broad range of reading materials

1. Which question is best answered by information in paragraph x?
2. What is the most likely reason _____?
3. What happened because _____?
4. What is the best summary of the selection?
5. Which of these best describes the problem in the passage?
6. How do _____'s feelings change from the beginning to the end?
7. Which words best describe _____'s character?
8. Based on the events in the pages, which of these is most likely true?

2A Understand how literary elements and techniques are used to convey meaning

1. How does the author organize paragraphs x through x?
2. How is this selection best described?
3. Which would be the best to read to learn how to _____?
4. What is the tone of paragraph x?
5. Why is paragraph ___ important in this selection?
6. Which sentence best describes the author's opinion of _____?
7. How does the author organize the information in this article?
8. In paragraphs __ to __, what is the author's tone?
9. What strategy does the author use at the beginning of this selection to create interest and to encourage readers to continue reading?

2B Read and interpret a variety of literary works.

1. This selection is an example of which kind of literature?
2. Why did the author write this selection?
3. Which type of literature is _____?
4. What is the mood in most of the story?
5. What type of story is _____?
6. With which statement would the author most likely agree?
7. Which of these is a theme of this story?

THINK MORE : INFER

ILS1B/C: I can infer.

Students can use this guide to make up their own inferential questions.

- Predict what will happen when _____.
- What is the main idea of _____?
- What is the meaning of this word from context?
- What do you think _____ means?
- What might have caused this change?
- Why did the author write this?
- How would the story have changed if _____?

- Which is the best title for this _____?
- What is the missing part?
- What was the author's point of view?
- If ____ changed, what would happen?
- Which person might have said this?
- What do you think happened before this story started?
- What do you think happens next?

Inferential Questions

1. Question:	2. Question:
Possible Answers: a. b. c. d.	Possible Answers: a. b. c. d.

GET IT CLEAR

Analytic questions ask you to **Get It Clear**—to look closely and think thoroughly--to organize the information so you see patterns and can explain the situation.

• Which is a kind of _____? • How is ___ like ___? • Which is an example of _____? • Which is the opposite of ____? • According to the text, which of these events caused _____ to happen? • How did the _____ start?	• In what sequence did _____happen? • How is ___ different from ___? • Which explains why ____ happens? • How does ____ depend on _____? • Which of these are alike? • What is the last thing that happened? • How is ____ related to _____?

Analytic Questions

1. Question: Possible Answers: a. b. c. d.	2. Question: Possible Answers: a. b. c. d.

ISAT Reading Question Vocabulary

Words listed on these charts are included in questions on the ISAT reading sample tests.
If a term is used at an earlier grade, it probably is used at the subsequent grades.
Terms may be used at earlier grades than indicated by the samples.

Students should use these terms to discuss the passages they read and write.

They can classify the words:

- Kinds of passages
- Ways of writing/Writer's Techniques
- Ways of thinking about what you read

Grade 3

alike	article	author
author's purpose	base word	belongs
complain	description	different from
entertain	example	explain
extended-response	fable	fairy tale
genre	illustration	inform
information	main idea	mainly
mean	most like	most likely
nonfiction	opinion	opposite of
organized	paragraph	passage
persuade	purpose	reader
rewrite	persuade	purpose
support your answer	synonym	title
understand		

Grade 4

according to	as used in	because
before	best describes	bold print
conclusions	describe	dialogue
direct	flashback	happened
humor	mainly about	minor detail
rhyme	sentence	statement
summary		

Grade 5

antonym	biography	cause
closest in meaning	detail	event
expect	expository	extraordinary
fictional	legend	meaning of
detail	event	expect
expository	extraordinary	fictional
legend	main idea	meaning of
most likely reason	narrative	order
occurred	persuasive	reason
refer to	selection	senses
structure	type of writing	

Grade 6

alliteration	comparison	descriptive
identifies	literary device	metaphor
narrator	onomatopoeia	plot
point of view	remember	repetition
simile	theme	tone
type of literature		

Grade 7

character	etymology	experience
first person	historical fiction	manual
occur	part of speech	phrase
poet	speaker	stanza
third person	third person objective	third person omniscient
volume		

Grade 8

aspect	essay	emphasize
observations	personification	hyperbole
ironic		

READING WORDS AND PHRASES: MY GLOSSARY

ILS1B: I can read strategically

List words or phrases that are part of how to read.
Then explain what each one means and give an example.

Word or Phrase	What It Means	My Example

Use your words to write about what you read.

Which Genres Should My Students Know?

1C: I can read a broad range of materials; 2B: I can interpret a variety of literary works.

CHECK PROGRESS:
Check the genres your students have read and will read.

MAKE PROGRESS:
A genre is a kind of literary work. It's a style that authors use to express their ideas. Students can write in a genre. First, they should read something in that genre. Then after they identify the elements of the genre, they can write their own version.

Genre	Definition	What the Writer Does
Fiction	Fiction is a type of writing based on imagination.	
Fantasy	Fantasy involves characters, situations, or settings that are not really possible.	
Historical fiction	Historical fiction is based on imagination but based on real events.	
Mystery	A mystery is a piece of fiction that deals with puzzles or detectives.	
Science-fiction	Science-fiction is an imaginary science narrative.	
Nonfiction	Nonfiction is a type of writing that explains a topic	
Biography	A biography is a nonfiction narrative of someone's life.	
Auto-biography	An autobiography is a nonfiction narrative of someone's life by that person.	
Adventure	Adventure could be either fact or fiction. It is a narrative about an exciting event.	
Drama	A play uses characters and dialogue to tell a story. It may be fiction or non-fiction.	
Poetry	Poetry is a type of writing that uses rhythm to tell ideas & feelings. It may rhyme and use symbols.	

Read Skillfully then Write about Fiction and Nonfiction

READING SKILL ILS1B Use Strategies ILS1C Comprehend Different Kinds of Texts	**Read then WRITE about fiction** ILS1B Analyze Texts ILS3B Write Clearly	**Read then WRITE about nonfiction** ILS1A Expand Vocabulary ILS5A Locate, organize information ILS3B Write Clearly
Describe and analyze character and plot	Read a story. *Write a paragraph about one character.* *Tell one trait of that character.* *Tell how that person's actions show that trait.* *Tell how that person's action is part of what happens in the story.*	Read about an event. *Write a paragraph about one person.* *Tell one trait of that person.* *Tell how that person's actions show that trait.* *Tell how that person's action is part of what happens in the event..*
Analyze and infer motives for actions, causes of effects—problem and solution	Read a story. *Write to tell:* ✓ Who took an important action? ✓ What was the action? ✓ Why? ✓ What happened because of that action?	Read about a real event. ✓ Who took an important action? ✓ What was the action? ✓ Why? ✓ How did that affect people?
Summarize	Read a story. *Write a summary.* ✓ *What was the problem?* ✓ *Who was in the story?* ✓ *How did they solve the problem?*	Read about any real event. *Write a summary about it.* ✓ *The event* ✓ *What caused it* ✓ *Who was involved* ✓ *How it ended*
Compare and contrast a story with another story or an experience.	Read a story. *Extended Response: compare and contrast one story with another.*	Read about a real event. *Extended Response:* *Tell how it is like a story you have read or another event.*
Infer the main idea and identify supporting examples.	Read a story. *Write to explain what you think the main idea of a story is.* *What do you think the writer wanted you to understand?* *Tell examples that support the idea.*	Read about a topic. *Tell what the main idea is. Then write a paragraph about it. Tell the main idea. Tell information that supports that idea.*

Which of these directions will I use to guide my students when they write an extended response?

Make sure you

- ○ **Read the question completely before you start to write your answer,**
- ○ **Write your answer to the question in your own words,**
- ○ **Write as clearly as you can so that another person can read your answer and understand what you were thinking,**
- ○ **Read over your answer to see if you need to rewrite any part of it.**

CRITERIA

I will emphasize these criteria:

____One at a time then as a whole set

____All the time

- ○ Reader demonstrates an accurate understanding of important information in the text by focusing on the key ideas presented explicitly and implicitly.
- ○ Reader uses information from the text to interpret significant concepts or make connections to other situations or contexts logically through analysis, evaluation, inference, or comparison/contrast.
- ○ Reader uses relevant and accurate references; most are specific and fully supported.
- ○ Reader integrates interpretation of the text with text-based support (balanced)

EXTENDED RESPONSE

- √ **READ**
- √ **THINK**
- √ **ORGANIZE**
- √ **WRITE**

Extended response questions on the Reading ISAT Samples 2008

Analyze extended response questions with students.
What does a student need to do to answer them clearly and completely?

3rd grade
Even though owls live all over the world, owls are alike in many ways. Explain how owls are alike. Use information from the passage and your own ideas to support your answer.

4th grade
Explain why the author thinks that the elephants in the passage are smart. Use information from the passage and your own ideas and conclusions to support your answer.

5th grade
Why would people want to save structures like Lucy and Sweet Willy? Use information from the story and your own ideas and conclusions to support your answer.

6th grade
What lessons does Jane learn in the passage? Use information from the passage and your own ideas and conclusions to support your answer.

7th grade
What challenges did the inventors face, and what could people learn from how they overcame these challenges? Use information from the passage and your own ideas and conclusions to support your answer.

8th grade
In the story, the author describes the behavior of adults at a little league game. Explain why adults behave as they do in this story. Use information from the story and your own observations and conclusions to support your answer.

Student-Written Extended Response Guide

ILS1B: I can write an extended response.

This is what you need to do to write an extended response.

First:

_____

_____

Then:

_____

_____

Then:

_____

_____

After you write the extended response, then you should

_____

_____

When you write the Extended Response, be sure you

_____

_____

ORGANIZE YOUR RESPONSE TO RELEVANT READING

Example: Black History Reader

A legacy is what someone leaves to other people, something that helps people after someone has died.

Use this chart to identify the legacy of an African American you read about.

Based on what you knew and what you read…

Explain what you think about the legacy of this African American.
What is this person's greatest contribution to us today?

First, write your idea.

_____

Then support it with information from the passage and your own experience.

From the Passage	From My Experience

NEW LEADERSHIP ***I can analyze a speech. ILS 1B***

In 1983, Harold Washington was the first African American elected mayor of Chicago. He brought important reforms. Read this speech and then answer the question.

Harold Washington's Acceptance Speech – April 12th, 1983

Tonight we are here. Tonight we are here to celebrate a resounding victory. We, we have fought a good fight. We have finished our course. And we have kept the faith. We fought that good fight. We fought it, with unseasoned weapons and with a phalanx of people who mostly have never been involved in a political campaign before. This has truly been a pilgrimage. Our government will be moving forward as well, including more people. And more kinds of people, than any government in the history of Chicago. Today… today… today, Chicago has seen the bright daybreak for this city and for perhaps this entire country. The whole nation is watching as Chicago is so powerful in this! Oh yes, they're watching.

Out of the crucible… Out of the crucible of this city's most trying election, carried on the tide of the most massive voter turn out in Chicago's history. Blacks. Whites. Hispanics. Jews. Gentiles. Protestant and Catholics of all stripes. Have joined hands to form a new democratic coalition. And… and to begin in this place a new democratic movement.

The talents and dreams of our citizens and neighborhoods will nourish our government the way it should be cherished and feed into the moving river of mankind. And we have kept the faith in ourselves as decent, caring people who gather together as a part of something greater than themselves. We never stopped believing that we were a part of something good and something that had never happened before.

We intend to revitalize and rebuild this city. To open its doors and be certain that its babies are healthy! And its old people are fed and well-housed. We intend, we intend that our city will grow again and bring prosperity to ALL of its citizens.

Extended Response

How was Harold Washington's election like the election in 2008 of Barack Obama? Use information from the speech and what you know about the 2008 election to answer. Make notes in the chart—here or on another page, then write your response.

Information from the Speech	Ideas and Information from My Experience

Main Idea Clarifier

If students need guidance to identify the main idea, this is a scaffold to do that.
ILS 1B: I can identify the main idea.

Directions: Place this page next to your book.
After you read each paragraph, draw a picture that shows what it says or list words that tell what's important in that paragraph.

What's the best title for this page?

Paragraph Reader/Page Reader

1B. I can identify the main idea

√ Place this page next to your book.
√ After you read each paragraph make a note in the right box.
√ Tell what is important in that paragraph.

George Washington Carver lived from 1864 to 1943. He spent much of his life helping farmers to use their land in better ways. His ideas have helped farmers in many countries around the world.	
Carver was in charge of farm research a Tuskegee institute, a college in Alabama. He taught students how to farm. He also worked with southern farmers on their land. In the southern part of the United States, most farmers had grown cotton for so many years that the soil had worn out. Carver showed them how to improve the land.	
Carver said the farmers should plant peanuts. Peanuts would enrich the soil. Farmers asked who would buy so many peanuts if they planted them. Carver answered by finding more than 300 new ways to use peanuts. Farmers could feed the vines to farm animals. They could use the hulls for fertilizer. Carver even found a way to make paper from the peanut shells.	
When Carver died, he left his money to help people to keep working on farm research. Today, people from many countries come to the George Washington Carver Foundation at Tuskegee Institute. There they learn better ways of farming.	

What is the main idea of the whole page?

_____

Write an extended response.
Explain what you think about the legacy of George Washington Carver.
What is his greatest contribution to us today?
First, write your idea.

_____

Then support it with information from the passage and your own experience.

Expand Math Progress

The following advice is from the Illinois State Board of Education.
You will find it and much more on the ISBE website, ISBE.net

WHAT WILL YOU DO?

Which if these ISBE-recommendations will you emphasize?

- ❑ Be familiar with the Illinois Learning Standards and the Assessment Frameworks
- ❑ Integrate test-taking skills into regular instruction
- ❑ Be familiar with and practice different test items with students
- ❑ Create a positive atmosphere for testing

Extended-Response in the Classroom: Ideas to help teachers help students

- ❑ Explain and display the "student-friendly" version of the scoring rubric
- ❑ Discuss "What you did" and Why you did it" for multiple-choice items, too.
- ❑ Discuss and display a variety of student work in the classroom
- ❑ Aim for the 4 on the rubric.
- ❑ Use a T-chart to help guide explanations—this helps some students to remember to explain what they did and why they did it.
- ❑ Use previous ISAT tasks from the sample books. (All are available online.)
- ❑ Write about math in a journal.
- ❑ Practice! Practice! Practice!

Which MATH WORDS Do My Students Need to Know and Use?

The following words are part of ISAT sample questions requiring students to know these parts of mathematics.

WORDS STUDENTS MAY FIND IN DIRECTIONS AND QUESTIONS

These words are included in questions and directions on the ISAT sample for all of grades 3-8, except for the following terms, which are included in the sample tests for grades 4-8: conclusive, measurable, relate, relationship

- √ *To help students understand these words individually, have them make a glossary.*
- √ *To help them recognize and comprehend them in questions, have them write statements and questions using these words.*

cause	compare	comparison
conclude	conclusion	conclusive
contrast	diagram	effect
estimate	estimation	graph
identification	identify	key
label	measurable	measure
predict	prediction	reflect
reflection	relate	relationship
represent	representation	similar
similarity	translate	

MATH TERMS

Numbers indicate grade the term is used first in samples. **See ISBE.Net for specifications of grade-level requirements in addition to these terms.**

Students can make their own math glossary and also use these words to make up math problems.

acute angle (5)	angle (5)	approximate (7)
approximately (7)	area (4)	bar graph (6)
centimeter (3)	characteristic (4)	chart (3)
circle graph (6)	circumference (8)	cone (3)
congruent (3)	consecutive (8)	coordinate (5)
cube (3)	cubed (4)	cubic (4)
cylinder (4)	cylindrical (8)	data (3)
data point (8)	diameter (7)	digit (3)
dimension (5)	dimensional (5)	equal (3)
equality (4)	equivalency (4)	equivalent (4)
expression (4)	figure (3)	fraction (4)
fractional (4)	grid (4)	hexagon (3)
incongruent (3)	inequality (6)	input (5)
integer (8)	intersect (5)	intersection (5)
likelihood (3)	likely (3)	line segment (4)
maximum (6)	mean (5)	median (6)
milliliter (8)	minimum (6)	mode (3)
negative (8)	number line (3)	number sentence (4)
obtuse angle (5)	output (5)	parallel (6)
parallelogram (7)	pattern (3)	pentagon (4)
perimeter (3)	perpendicular (6)	pi (7)
pictograph (3)	place value (4)	plane (7)
plot (5)	point (3)	polygon (7)
positive (8)	prism (3)	probability (4)
probable (4)	Pythagorean formula (7)	quadrilateral (8)
random (6)	randomly (6)	range (6)
ratio (5)	rational (5)	rectangle (3)
rectangular (3)	rectangular prism (4)	rectangular pyramid (5)
repeat (3)	repeating (3)	right angle (5)
right triangle (7)	scale (5)	scatter plot (7)
sector (8)	segment (4)	slope (8)
solve (3)	square (4)	square pyramid (7)
squared (4)	surface area (8)	survey (4)
symmetrical (4)	symmetry (4)	table (6)
tally (3)	trapezoid (4)	triangle (4)
triangular (4)	triangular prism (4)	triangular pyramid (5)
value (4)	Venn diagram (4)	vertex (3)
vertices (4)	volume (3)	x-axis (8)
y-axis (8)		

MATH VOCABULARY

At each of these grade cycles, the following terms should be part of the students' working vocabularies. Source of the lists of words: ISBE. For more math resources from ISBE, go to ISBE.net.

By Third Grade

12 inches = 1 foot	cylinder	hundred	non-standard unit	product	standard unit
12 months = 1 year	decimal	impossible	number cube	pyramid	steps
2-dimensional	diameter	inch (in.)	number line	quadrilateral	subtraction (–)
3 feet = 1 yard	difference	is equal to (=)	number pair	quart	sum
365 days = 1 year	digit	kilogram (kg)	number pattern	quarter	survey
366 days = 1 leap year	distance	is greater than (>)	number sentence	quotient	symbol
3-dimensional	divisible	is less than (<)	octagon	radius/radii	symmetry/symmetrical
52 weeks = 1 year	division (÷, /, fraction bar)	is not equal to (≠)	odd/odd number	ray	table
7 days = 1 week	dollars ($)	kilometer (km)	operation	reasonable	tally
a.m.	dozen	label	order	rectangle	tally chart
abbreviations for days and months	drawn to scale	least	ordered pair (*x, y*)	rectangular prism	temperature
about	edge/edges	least likely	ordinal numbers	rectangular pyramid	thousand
above	equal	length	ounce (oz)	represents	time
addends	equation	less than	p.m.	results	ton
addition (+)	estimate/estimation	likely	pair	rhombus	total
angle	even/even number	line	parallel	right angle	trapezoid
area	face/faces	line graph	parallelogram	round down	triangle
average	factor	line of symmetry	pattern	round up	triangular prism
bar graph	farthest	line segment	pentagon	same	triangular pyramid
below	figure	long	perimeter	scale	true
between	flips	mass	pictograph	scale of numbers	turns
capacity	folded	measure	pie graph	second	twice
cardinal numbers	foot/feet (ft)	measurement	pint	segment	unit
centimeter (cm)	fraction	meter (m)	place value	set	unknown
cents (50¢ or $0.50)	gallon	metric	plane figure	shape	unlikely
chance/chances	gram (g)	mile (mi)	plus	side/sides	value
change	graph	milligram (mg)	point	similar	variable
chart	greater	milliliter (mL)	polygon	single	Venn diagram
circle	greatest	millimeter (mm)	possible	size	vertex/vertices
circle graph	grid	minus	pound (lb and #)	solid figure	vertical
cone	group	month	prediction	solve	volume
congruent	height	more than	prism	spent	week (wk)
coordinates	hexagon	most	probability	sphere	weight
corner	histogram	most likely	probable	spinner	wide
cube	horizontal	multiply/multiplication (X)	probably	square	width
cup	hour	nickel	problem solving	square centimeters	yard (yd)
				square pyramid	

By Fifth Grade

acute angle	least common multiple
angle	liter (L)
approximately	lowest terms
arc	mean (arithmetic average)
base	median
bisect	midpoint
characteristic	miles per hour (mph)
chord	mode
circumference	multiple
column	multiply/multiplication (* or •)
combination	nonagon
composite number	*n*th term
congruent symbols in	obtuse angle
coordinate graph	order of operations
correspond	per
cubic units (3)	percent (%)
data	perpendicular
decimeter	pint (pt)
degrees (°)	polygons
degrees Celsius (°C)	portion
degrees Fahrenheit (°F)	prime number
diagonals	proportion
diagram	quart (qt)
dimensions	quotient
dividend	random
divisor	range
elapsed time	ratio (":" or "to")
equilateral triangle	reflections
exactly	regular polygon
expression	right angle symbol
gallon (gal)	right triangle
greatest common factor	rotations
heptagon	row
intersect	scale drawing
intersecting lines	scalene triangle
irregular polygon	sequence
is approximately equal to (≈)	slides
is congruent to (≅)	square units (2)
is parallel to (||)	stem-and-leaf plot
is perpendicular to (⊥)	time zone
is similar to (~)	ton (t)
isosceles triangle	triangle (Δ)
	value of

By Eighth Grade

adjacent	measure of angle
alternate exterior angles	minimum
alternate interior angles	odds
altitude	permutation
approximate	principle
ascend/ascending order	proportionally
axes	Pythagorean
commission	Theorem
complementary	quadrants
compound inequality	radical
consecutive	random
convert	rate
corresponding angles	real number
decagon	satisfy
descend/descending order	scattergram
discount	semi-circle
distinct	sequence
divisibility	simple interest
domain	skew
down payment	square root
earns	supplementary
factorial	surface area
foot (ft or ')	transversal
function	vertical angles
fundamental counting	*x*-axis
girth	*y*-axis
hypotenuse	
inch (in. or ")	
independent	
inequality	
is greater than or equal to (≥)	
is less than or equal to (≤)	
maximum	

Activity Projects to Make these Words Working Vocabularies

Students can sort these words into categories such as "operations" words and "size and shape" words. They also can use them as a check-list for their own math glossaries. Vocabulary from these lists should be included in explanations and in multiple choice and open-ended questions that students construct and take so they become confident math readers and writers. The words are cumulative, so students at upper grades should have a working knowledge of all the words on the tables. Students needing more assistance in learning these terms should learn them in context not as isolated words. Therefore, they should use them in sentences they write to explain what they mean with math examples they find or create.

MATH GLOSSARY

Topic: _____

List words that are part of one part of math.
For example, list words that are about fractions.

Word or Symbol	My Example

Use the words to write about math.
Use them to make up questions, too.

Math Digest

Use this guide to re-visit math you learned.

Topic: _____

What are some important words to know to use this math?

Word or Symbol	What It Means

What's important to know about this math?

_____

_____

_____

_____

_____

_____

Student Friendly Rubric—MATH—grades 3-4 (ISBE.net)

Mathematical Knowledge: Do you know it?

- √ I get the right answer.
- √ I label my answer correctly.
- √ I use the right math words to show I understand how math works.
- √ I work it out with no mistakes.

Strategic Knowledge: How do you plan?

- √ I find all the important parts of the problem, and I know how they go together.
- √ I show a good plan about how I got my answer.
- √ I show all of the steps I use to solve the problem.
- √ I find most of the important parts of the problem.
- √ I show most of the steps I use to solve the problem.

Explanation: Can you explain it?

- √ I write <u>what</u> I did and <u>why</u> I did it.
- √ If I use a drawing, I can explain all of it in writing.

You will find the rubrics for other grade levels at ISBE.net.

MY MATH PROBLEM SOLVING STEPS

Teachers can use this guide to figure out if a student needs help at different points in problem solving.

Write answers to these questions when you solve a math word problem.

Step 1. What are you going to figure out?

Step 2. How will you do it? What will you do to solve the problem?

Step 3. *Underline the information you need to find the answer.*

Step 4. What do you estimate the answer will be? _____

Step 5. Solve the problem here.

What is your answer? _____

Step 6: Write to explain what you did and why.

What I Did	Why I Solved the Problem This Way

My Own Guide to Solving Problems on a Math Test

What to do when you open the test booklet:

What to do when you read a word problem:

How to explain how you solved a problem:

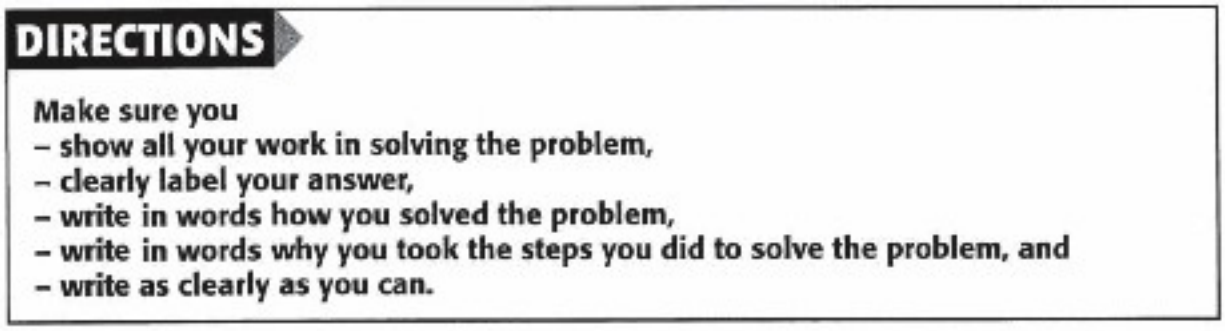
How to make sure you have enough time to solve the problems and check your answers.

What else to do to succeed on the ISAT math test:

The ISAT Extended Response in Math:

SHOW and TELL

WHAT ISAT REQUIRES



DIRECTIONS

Make sure you
– show all your work in solving the problem,
– clearly label your answer,
– write in words how you solved the problem,
– write in words why you took the steps you did to solve the problem, and
– write as clearly as you can.

MATHEMATICAL KNOWLEDGE
The response shows complete understanding of the problem's mathematical concepts and principles.

STRATEGIC KNOWLEDGE
The response shows complete evidence of an appropriate strategy that correctly solves this problem.

EXPLANATION
The response provides a complete written explanation of the solution process by clearly explaining what was done and why it was done.

Source: ISBE.net

Which of these ISBE recommendations will I do?

- ○ Model
- ○ Think Out Loud
- ○ Student Partners Problem Solve, one writes the steps, the other the reasons
- ○ List and post common strategies
- ○ List and post appropriate reasons
- ○ Put steps, strategies, and reasons on cards and have students select appropriate elements of their solutions and explanations

CHOOSE A STRATEGY

Here are some strategies to solve a problem
__make a model
__see if it will take just one step to solve it or more steps
__guess, check, then correct if I need to
__look for a pattern
__draw a picture or diagram so I could see what it looked like
__figure out what information I need
__underline the information I need and cross out the things I don't need
__make a graph
__choose an operation
__make a list of operations to do
__make a table or chart

SHOW

Solve the problem. Use pictures, graphs, diagrams, lists—other ways to show the problem and how you solve it.

TELL

Tell what you did—and why.
Use as many rows as you need.
We put five rows—you can add more if you need them.
If you don't take five steps, write on only the rows you need to tell what you did.
Be sure to end with checking your work. This is a chart you could use to make sure you tell what you did and why.

What I did	**Why I did it this way**
First, I	to see
Then I	to figure out
Then I	so that
Then I	because
Finally, I	because

EXPAND WRITING PROGRESS

WRITING PRIORITIES

Which Essential Writing Skills are Priorities Based on Your Data?

Kind of Text	Element of Writing
__paragraph __essay __poem __letter __story __history __biography __report __extended response	__focus __support __organization __spelling, grammar, punctuation __integration __introduction __transitions __conclusion

Which Teaching Strategies will you emphasize to respond to student needs:

__model “write aloud”
__focus strategy of the week
__post writing guides
__students use graphic organizers to organize writing
__students read their own writing aloud—with partner or group

How will you make sure that students write across the curriculum every week?

Writing Requirements

What does ISAT Writing require?

This answer is from the Illinois State Board of Education.
You'll find it and many more resources at ISBE.net.

Third and Fifth Grade: Expository

Expository Writing

- √ Presents factual information:
- √ Explains, defines, describes, informs
- √ Provides supporting reasons, examples, facts
- √ Maintains a clear focus
- √ Ends with an effective conclusion

Sixth Grade: Narrative; persuasive (2 sessions)
Eighth Grade: Narrative; persuasive (2 sessions)

Narrative Writing

- √ Tells a story in logical order by
- √ Using specific details to explain one event
- √ Including the author's reactions
- √ Moving through time
- √ Writing a beginning, middle, end

Persuasive Writing

- √ Takes a position for or against on an issue
- √ Maintains the position clearly throughout
- √ Uses facts, examples to support the position
- √ Convinces the reader to believe or act
- √ Includes an effective conclusion

ISAT - Student Writing Checklist (ISBE.net)
Expository, Grade 3-5

Focus

I have an interesting beginning to my composition that clearly explains what I am going to write about.
My composition is about the subject or topic.
If I use previewing, I remember to write about **each** point.
I write a closing that successfully ties my ideas together.

Support

I use specific examples and details to explain **each** of my points.
I use the same amount of support and detail for each of the points I make.
I use the same *voice** throughout my composition.
I use a variety of specific and descriptive words to make my composition more interesting for the reader.
I use words correctly and purposefully.

Organization

My composition is organized so that it makes sense.
I use paragraphing to help organize my thoughts.
I use transition words to connect my sentences and paragraphs so that my composition flows smoothly when I read it.
My sentences begin in different ways.
My sentences are different lengths to make my composition more interesting.
I avoid using the same words over and over again.

Conventions

I use complete sentences.
I spell familiar words correctly.
I spell higher-level words the way they sound.
I use capitalization and punctuation correctly.
I make sure that the subject of my sentence agrees with the verb.
I use the same verb tense throughout my composition.

***Voice –** The individuality of the writer coming through on the page. Voice gives writing a distinctiveness. The reader of the composition has the feeling that the writer is talking directly to him or her.

ISAT - Student Writing Checklist
Narrative, Grade 6-8 (ISBE.net)

Focus

I use my introduction to set the purpose of my composition.
I have an interesting start to my story that catches the reader's attention.
My composition is about the subject or topic.
I write a closing that effectively unifies my writing.

Elaboration

I use specific examples and details to describe the event or experience and my reactions and/or the reactions of others.
I balance my use of description throughout my composition.
I use the same *voice** throughout my composition.
I use a variety of specific and descriptive words and phrases to make my composition more interesting for the reader.
I use words correctly and purposefully.

Organization

My composition moves logically through time and has a beginning,
a middle, and an ending.
I use paragraphing to help organize my story.
I use transition words and phrases to connect my sentences and paragraphs so that my composition flows smoothly when I read it.
My sentences begin in different ways.
My sentences are different lengths to make my composition more interesting.
I avoid using the same words over and over again.

Conventions

I use complete sentences.
I spell familiar words correctly.
I use capitalization and punctuation correctly.
I make sure that the subject of my sentence agrees with the verb.
I use the same verb tense throughout my composition.

Voice – The individuality of the writer coming through on the page. Voice gives writing a distinctiveness. The reader of the composition has the feeling that the writer is talking directly to him or her.

ISAT - Student Writing Checklist (ISBE.net)
Persuasive, Grade 6-8

Focus

I use my introduction to set the purpose of my composition.
I clearly state my position on the topic.
I stay on the issue throughout the composition.
I write a closing that effectively summarizes my position.

Support

I use specific examples and details to explain each of the points that
I use to explain my position.
I balance my use of detail and description throughout my composition.
I use the same *voice** throughout my composition.
I use a variety of specific and descriptive words and phrases.
I use words correctly and purposefully.

Organization

My composition is arranged logically and makes sense.
I use paragraphing to help organize my points.
I use transition words and phrases to connect my sentences and paragraphs so that my composition flows smoothly when I read it.
My sentences begin in different ways.
My sentences are different lengths to make my composition more interesting for the reader.
I avoid using the same words over and over again.

Conventions

I use complete sentences.
I spell familiar words correctly.
I use capitalization and punctuation correctly.
I make sure that the subject of my sentence agrees with the verb.
I use the same verb tense throughout my composition.

Voice – The individuality of the writer coming through on the page. Voice gives writing a distinctiveness. The reader of the composition has the feeling that the writer is talking directly to him or her.

What writing progress will I emphasize second quarter?

Third-Fourth-Fifth Grade

_3A precision **_3B clarity** _3C vary formats and audience

Weeks 12-16

Organize and write essay with clear focus	Edit week 12 essay or letter for focus and support	Organize/Write poem with vivid language 3C (relate to author's choice of words; Thanksgiving)	Organize/Write essay with focus, support, clear introduction and conclusion	Edit week 15 essay for clear focus, support, introduction, conclusion

Weeks 17-20

Outline, draft expository essay, emphasis on focus, support	Revise write expository essay, emphasis on focus, support	Outline and write essay; emphasis on focus and support and transitions	Edit essay List steps to Writing an essay

Sixth-Seventh-Eighth Grade

_3A precision **_3B clarity** _3C vary formats and audience

Weeks 12-16

Outline essay (3B) __narrative __persuasive clear focus and support	*Edit essay for transitions and coherence 3B*	Organize/Write poem with vivid language 3C	*Organize/Write essay with focus, support, organization, clear introduction and conclusion*	*Edit week 15 essay Write own guide to writing an expository essay.*

Weeks 17-20

Outline, draft __narrative __persuasive essay with emphasis on focus and support 3BC	*Revise week 17 essay with emphasis on focus and support 3B,C*	*Outline and write __narrative __persuasive essay with emphasis on focus support and transitions 3B,C*	*write essay __persuasive __narrative write guide to writing/editing an essay.*

Think by the Week

Plan lessons that develop from introduction through independence.

Focus on Monday
Develop on Tuesday
Expand on Wednesday
Assess on Thursday
Synthesize and Complete on Friday

EXAMPLE OF A WEEK OF DEVELOPING PERSUASIVE WRITING ABILITIES

This is an example for a class that is just beginning to learn how to write this essay.

It is a developmental progression:

Day 1—how do you outline a persuasive essay?
Day 2—What do you put in a persuasive essay outline?
Day 3—How do you start a persuasive essay?
Day 4—How do you make sure you start well?
Day 5—How do you outline a **good** persuasive essay?

Monday	*Tuesday*	*Wednesday*	*Thursday*	*Friday*
T: model—a persuasive essay outline S: contribute to outline	T: Model—revisit the outline S: Make your own outline, with important support	T: Model—write out loud—first paragraph S: Write your own first paragraph	T: Model—persuasive checklist—how do you make sure you make your point clear? S: Exchange and edit paragraph	T: Paragraph Tune-up S: Write a guide—how do you outline a **good** persuasive essay?

Think by the Week

Plan lessons that develop from introduction through independence.

Focus on Monday
Develop on Tuesday
Expand on Wednesday
Assess on Thursday
Synthesize and Complete on Friday

EXAMPLE OF A WEEK OF DEVELOPING PERSUASIVE WRITING ABILITIES
Note: This sample plan is for a class that has already learned how to write an essay and has written persuasive passages. If a class has not completed those requirements, then the class would take more time to develop each of these elements.

One way to adjust to clarify and develop students' competence would be to start by writing a three-paragraph letter instead of a full essay.

It is a developmental progression:

Day 1—how do you outline a persuasive essay?
Day 2—How do you start a persuasive essay?
Day 3—What goes in a persuasive essay?
Day 4—How good is your essay?
Day 5—What is important for a good persuasive essay?

Monday	*Tuesday*	*Wednesday*	*Thursday*	*Friday*
T: model S: contribute to outline Make your own outline	T: Model—write out loud S: Write your own introduction	T: Model—write out loud S: Write your own essay	T: Model—essay checklist; how to conclude well. S: Edit your essay. Add a conclusion.	T: Essay Tune-up S: How to write a good essay.

Essay Organizer

ILS 3B: I can organize an essay with a main idea and supporting information

What's the focus—my idea?

How I'll Start
What I'll Tell about Next ***Information I will include***
What I'll Tell about Next ***Information I will include***
What I'll tell about Next ***Information I will include***
How I will end so my reader will know what is important.

Essay Organizer

ILS 3B: I can organize an essay with a main idea and supporting information

Purpose: __explain __narrate __persuade

Focus: _____

Introduction: What I'll say

Paragraph 1	Paragraph 2	Paragraph 3
Idea	Idea	Idea
Information	Information	Information

You can more paragraphs.

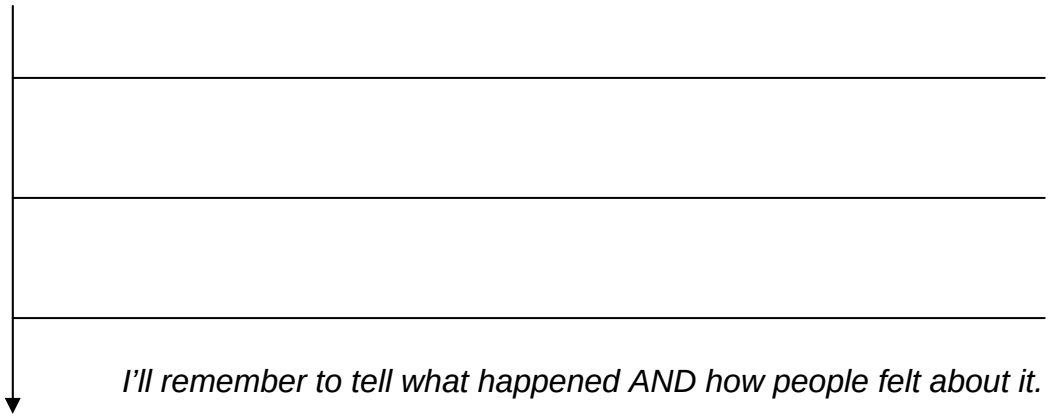
Conclusion: What I'll say

Narrative Writer

ILS 3B: I can write a narrative.

What event will I explain? _____

What parts of the event will I tell? List them on this time-line.



I'll remember to tell what happened AND how people felt about it.

What persons will I include?

Person	*How this person felt about the event*

How will I start my narrative?
What will I say to make it clear what I'm telling and why?

_____

How will I end my narrative so people know what was important about it?

_____

Persuasive Writer: What's My Position?

ILS 3B: I can write a persuasive text.

What's the issue? _____

What's my position? _____

_____

What evidence will I include to support my position?

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

(You can use the boxes to number the order in which you will give that evidence.)

How will I start my persuasive writing?

_____

_____

How will I conclude so people know how I supported my position?

_____

_____

EXPAND SCIENCE PROGRESS

Which of these strategies will you emphasize?

__students read about science topics
__students use graphic organizers to organize information about science topic of the week
__make science term “word exhibit”
__students write science learning reports
__students make and interpret data tables and graphs
__students illustrate science texts
__students write weekly science summary

Which Fourth Grade ISAT Science Vocabulary should my students know?
When students take the ISAT science test, they will need to be able to comprehend science explanations and questions. The following list includes some important 4th grade level science content words and some words that are used to ask students to interpret information on the test. The list includes words from the ISAT 2008 Sample Test for Fourth Grade.

Ways to help students develop fluency with these words include:

- Make a glossary
- Group words by root words
- Group words by topic
- Write about a topic in science using some of these words.
- Make a cross-word puzzle or matching game with these words.

amount	attract
attraction	carnivore
carnivorous	cause
charged	compare
conclude	conclusion
conclusive	contrast
data	decompose
density	dense
diagram	effect
erosion	erode
estimate	estimation
expand	experiment
friction	gas
graph	identify
identification	intensity
invertebrate	lever
liquid	measure
measurable	negative
nutrient	nutrition
nutritious	particle
photosynthesis	plane
pole	positive
predatory	prey
predict	prediction
pressure	predator
relate	relationship
repel	resource
similar	similarity
solid	temperature
variable	vary
vertebrate	weigh

Which Seventh Grade ISAT Science Vocabulary do my students need?
When students take the ISAT science test, they will need to be able to comprehend science explanations and questions. The following list includes some important 7th grade level science content words and some words that are used to ask students to interpret information on the test. The list includes words from the ISAT 2008 Sample Test for Seventh Grade.

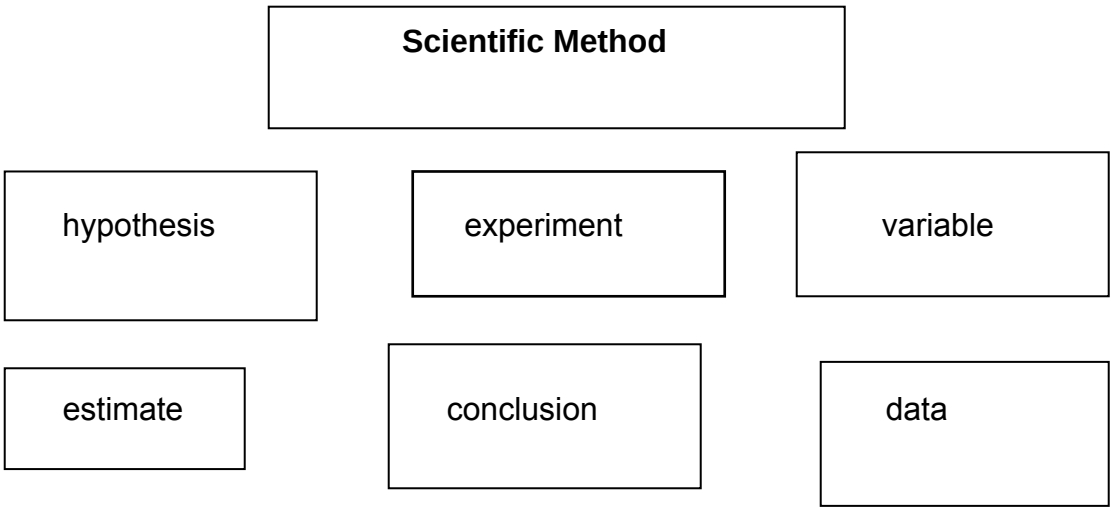
Ways to help students develop fluency with these words include:

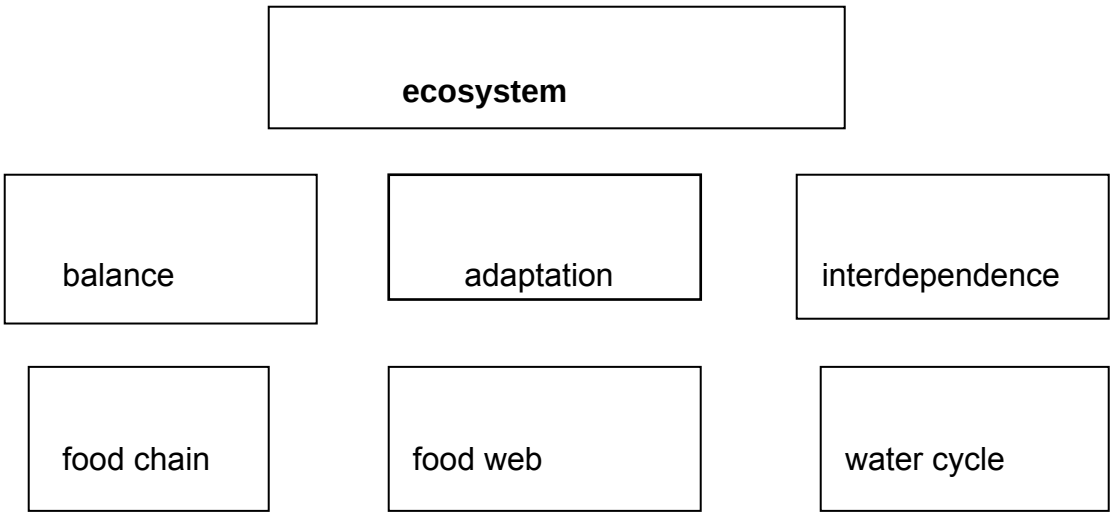
- Make a glossary.
- Group words by root words.
- Group words by topic.
- Write about a topic in science using some of these words.
- Make a crossword puzzle or matching game with these words.

amoeba	analysis	analyze
average	bacteria	bacterium
base	bio (prefix)	biodegradable
biodegrade	buoy	buoyancy
buoyant	carnivore	carnivorous
cause	compare	comparison
conclude	conclusion	conclusive
condensation	condense	constellation
consume	consumption	contrast
degrade	diagram	diffraction
Diffuse	diffusion	dominant
dominate	effect	erode
erosion	estimate	estimation
exert	factor	flagellum
friction	granite	graph
herb	herbivore	identification
identify	igneous	litmus paper
mass	measurable	measure
media	medium	meiosis
mitosis	obsidian	omni- (prefix)
omnivore	orbit	osmosis
palmate	parasite	pinnate
pole	predict	prediction
rate	recess	recessive
reflect	reflection	refract
refraction	relate	relationship
reproduce	reproduction	sedimentary
separation	sequence	sequential
similar	similarity	trend
volume		

Set up Science Word Exhibits—ask students to illustrate the words.

Examples of Science Vocabulary Word Walls





SCIENCE GLOSSARY

List words or phrases that are important to science.
Then explain what each one means and give an example.
You can make your glossary for one topic

TOPIC: _____

Word	What It Means	My Example

Use your words to write about this topic.

My Science Learning Progress Name: _____

Each day write what you learned that you think is most important.
Then on Friday summarize your learning.

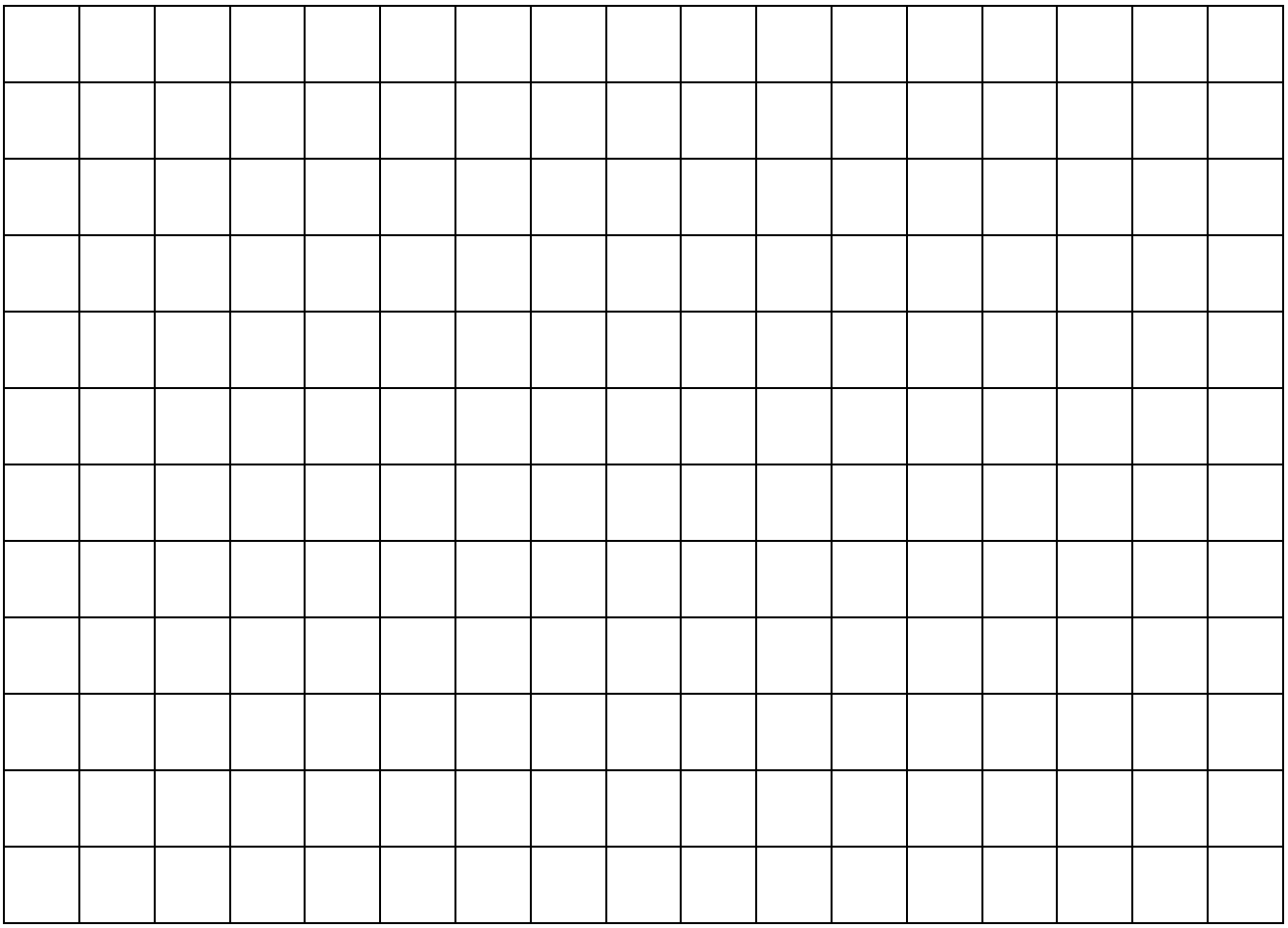
This Week's Focus: _____

Monday	
Tuesday	
Wednesday	
Thursday	
Friday	*Write a paragraph that summarizes what you have learned.*

Make Graphs to Strengthen Math and Science

ILS Math Competence: can construct, and explain patterns with graphs.

Title: _____



Explain what the graph shows. _____