Strategy of the Week

INFORMATION SHEETS Elementary School

Strategy: Use a Pattern

Definition

- Organizing information in a set or series
- Using order and repetition

Key Vocabulary to Use		Kinds of Questions
List	Repeat	 How is this information organized?
Organize	Predict	 How can you find what comes next?
Compile		 What is a way to complete the
Set		pattern?

Reading

- <u>Sequence Chart</u> Students arrange a series of events from the story they have read in chronological order (sentence strips are great for this!).
- <u>Think-Pair-Share and Shoulder Partners</u> List events in the story in the order in which they happened or predict a sequence for what will come next.
- Schedule Reinforce this skill by referring to daily routines and patterns.
- <u>Suggested Reading</u> The Very Hungry Caterpillar, Rosie's Walk, Sam Johnson and the Blue Ribbon Quilt.

Math

- <u>Number Sense Activities</u> Number patterns, geometric patterns, operational patterns.
- <u>Number Line</u> Identify patterns using skip counting, odd/even, etc.
- <u>Problem Solving</u> Ask students to identify patterns in a series of problems.
 For example, after solving several problems with an operation or method, ask students to identify what they know about how the operation works.

- Group Discussions Student groups can undertake a scavenger hunt activity to locate patterns. In particular after studying an author for several books, students can identify patterns used by the particular author or in a particular genre.
- Graphic Organizers T-Charts and Story Maps can be created to illustrate patterns in a story.

Strategy: Solve a Simpler Problem

Definition

- Solving pieces of a problem separately
- Identifying part of a problem that is easier to solve

Key Vocabulary to Use

Plan Solve Simplify Understand

Identify

Kinds of Questions

- What information do you need to solve the problem?
- Can you find a smaller problem within the whole problem?

Reading

- Reading Comprehension Students can focus on problems and solutions in the story. In groups or partnerships they can simplify situations and propose solutions.
- <u>Graphic Organizers</u> Bubble Maps can be used by placing a complex situation in the center circle and then having student identify simpler parts of it and placing them in surrounding circles.

Math

- <u>Problem Solving/ Strategies</u> Focus students on skills such as rounding, estimating and using multiples of 10 when large numbers are involved in the problem to make solving a problem easier.
- <u>Journals</u> Students can write journal entries describing the strategies employed to solve word problems.

Writing

 <u>Partner Reading</u> – Using word attack strategies students can figure out the meaning of smaller parts of a word (prefix, root, suffix) to aid in understanding an entire word.

Strategy: Make a List

Definition

- Organizing all of your information into a group
- A way to keep track and monitor various possibilities

Key Vocabulary to Use

List Organize Name Compile

Recall

Kinds of Questions

- What steps do you need to take?
- Can you organize this information?
- Make a list of all the information given to you

Reading

- <u>Think-Pair-Share and Shoulder Partners</u> Students list any given type of information from the story. For example, all the characters, the settings, etc.
- Sequence Chart Students list all of the events from the story in order.
- Recommended Reading Rosie's Walk by Pat Hutchins, One Good Horse by Ann Scott, Two Ways to Count to Ten By Ruby Dee and The Empty Pot by Demi.

Math

- <u>Strategy</u> Students list all important information in one column and all extraneous information in another column.
- <u>Collecting Data</u> Students collect data in surveys and make lists of the results.
- <u>Problem Solving</u> Students make a list of the steps they will need to take in order to solve the problem. They then use the list in order to get a solution. This can be done in math journals.

- <u>Graphic Organizers</u> Bubble Map; K-W-L; Prediction Chart.
- <u>Pre-writing Activity</u> Generate a "Things we Notice About..." list of themes, characters, and settings so far in books by a particular author.

Strategy: Work Backward

Definition

- Solve a problem by starting with the last step
- Figure out what kind of answer you need to get and work in reverse to get the information you need

Key Vocabulary to Use		Kinds of Questions
Operation	First	How would you change to create
Backward	Last	a different ending?
Reverse	Inverse	 Which event could not have
Before		happened if?

Reading

- <u>Interactive Story Circle</u> Starting from the end of the story students take turns and telling an event.
- Sequence Chart Using sentence strips students tell the story in reverse.
- Recommended Reading This is the Bread I Baked for Ned, The Seven Chinese Brothers, There Was an Old Lady.

Math

- <u>Journals</u> Students explain how, when given a result, they can undo steps or work backward to find what they started with.
- <u>Problem Solving</u> Focus students on orders of operation which "undo" or are the reverse of each other.

- Book Report Pyramid- Students use this graphic organizer to recap story elements and events by starting at the bottom and working their way to the top.
- <u>Timelines</u>- Students plot events in a story in reverse or biographical information on an author from most recent to earliest work.

Strategy: Make a Table

Definition

- A way to organize information graphically
- A way to use columns and rows to show information

Key Vocabulary to Use		Kinds of Questions
Table	Column	 How can we organize this
Date	Row	information by category?
Pattern	Heading	What can we learn from the table?
Total	Title	

Reading

- Read Aloud "Thumbs Up/ Thumbs Down" a table showing the number of students who liked or disliked a story (in T-chart format) and discuss recommendations.
- Reading Together While reading stories about different countries gradually fill in a table showing the city and country discussed.
- <u>Suggested Reading</u> The Stories Julian Tells, The Plant that Ate Dirty Socks The Grouchy Ladybug, The Very Hungry Caterpillar.

Math

- Graphing Students can use information gathered in a table (birthdays, favorite foods, favorite authors, etc) to create graph, then write conclusions.
- Word Problems Focus students on using key information to express on tables when using this strategy (focus on columns, headings and how they help you to see a pattern).
- <u>Journals</u> For specific tables in lessons, students can explain why certain columns are necessary.

- <u>Pre-writing activity</u> Certain authors such as Tomie DePaola and Patricia Polacco use names for their characters that represent something about them.
 Students can make a table using character names and what they mean.
- Graphic Organizers Use a Venn Diagram to compare characters.

Strategy: Use Logic

Definition

- To form conclusions based on reasoning
- Using careful and correct reasoning or thinking

Key Vocabulary to Use		Kinds of Questions	
Then	After	 How would you solveusing what 	
Next	Always	you've learned?	
Before	Sometimes	 How would you apply what you learned 	
None	All	to develop?	
If	Never	• Can you make use of the facts to?	

Reading

- <u>Think-Pair-Share & Shoulder Partners</u> Students discuss how two characters/ story events are related and think of a possible third that can follow.
- Journal Writing /Character Letters Based on certain character's traits, write what you think he/she would do if the story were to continue OR have students write letters to their families as if they were a certain character.
- <u>Suggested Reading</u> Harry Potter Series, Flat Stanley by J. Brown and Popcorn by Frank Asch, Penelope Gets Wheels By E. Peterson, The Magic School Bus Series and One Lonely Cat by B. de Regniers.

Math

- <u>Logic Statements</u> Have students work out "If...Then..." problems which focus more on what needs to be done versus actually doing the problem
- <u>Math Journals</u> Have students review not just what they did but why they chose to do it.
- New Concepts Challenge students to find new approaches and identify changes in thinking by changing one element or piece of information in problems.

- <u>Graphic Organizer</u> After studying an authors background, create an attribute chart containing categories the class thinks the author will focus on.
- Partner Work Students can investigate how and why the author chose to write about a specific topic.
- Projects Writing different endings/ Lost Chapters and Relationship Maps.

Strategy: Use Objects/Act It Out

Definition

- Use manipulatives to help you see what to do with the problem
- Create a play where you can show what happens in the problem

Key Vocabulary to Use

Manipulative Show Act Share

Role Play Model

Kinds of Questions

- How can you show us using...?
- How can you demonstrate...?
- How would you organize...to show...?

Reading

- Reading Comprehension Students can act out the conflict in the story and have classmates volunteer possible solutions for them to try out.
- <u>Vocabulary</u> Students can pantomime word meanings or even situations that demonstrate word usage.
- Recommended Reading The Shape of Me and Other Stuff by Dr. Suess, Fractions are Parts of Things, and Arthur's Funny Money.

Math

- New Concepts Challenge students to solve problems by role playing math strategies.
- Word Problems Students can use manipulatives (i.e. colored cubes, marbles, Unifix cubes, counters, place-value blocks & fractional models) to help devise strategies to solve word problems.

- Role Playing Students can act-out, identify and discuss character traits, feelings and events from a story.
- <u>Character Party</u> Students can choose a favorite character created by an author or one they have studied and bring that character to life by dressing up and making puppets and props.

Strategy: Make a Graph

Definition

- A picture that shows information by using bars lines or symbols
- A visual representation of a set of data

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Key Vocabulary to Use		Kinds of Questions
Data Axis Vertical Horizontal Survey Key	Bar Line Pictograph Coordinate Tally	 What kind of data is shown on the following line graph, bar graph,? Describe the pattern shown in the following pictograph, line graph,?

Reading

- <u>Graphic Organizers</u> Make a graph of student opinions about a character or story.
- Read Alouds/ D.E.A.R. Students can create a graph based on their favorite title done by taking surveys of the class.
- Reading Comprehension Students can create a graph based on authors who have written a variety of genres.

Math

 Word Problems – Students can record data from word problems on line graphs, bar graphs or pictographs.

- <u>Graphic Organizers</u> Students can vote on their favorite titles or characters, then tabulate and graph results. Students can graphically illustrate responses to characters, authors, etc in semantic maps or webs
- <u>Partner Work</u> Students can categorize books by genre, illustrations, characters, figurative language, story problems and solutions.

Strategy: Make a Drawing/Use a Model

Definition

- Drawing a picture to help you "see" the problem
- A kind of model that is useful for showing the size and shape of objects

Key Vocabulary to Use		Use	Kinds of Questions
	Model	Label	 How can you show what this looks
	Construct	Show	like?
	Build	Design	Can you construct a model to show
	Plan	Draw	your work?

Reading

- <u>Mapping</u> Students can draw a map illustrating the various settings for events in the story.
- Vocabulary and Writing Activities Students can use graphic organizers in the pre-writing step of their writing.
- Recommended Reading The Paper Crane, Grandfather Tang's Story, The Painter and The Wild Swans.

Math

- <u>Problem Solving</u> Focus students on using pictures and graphic organizers to help them visualize an answer or strategy for a problem.
- <u>Math Journal</u> Have students draw pictures to illustrate the various steps they took to solve a problem.

- <u>Favorite Scenes</u> Ask students to draw/paint their favorite scenes from a story.
- <u>Comic Strips</u> Ask students to create comic strips that show the key events in a story.
- <u>Dioramas</u> Have groups build models of the main setting for a story.

Strategy: Guess & Check Experiment

Definition

 Making a reasonable guess to solve problems and trying them out to see if they work

Key Vocabulary to Use

Reasonable Check
Try Experiment

Plan Guess

Kinds of Questions

- Is this a reasonable guess?
- What are some ways to try this problem? Brainstorm with a partner
- Did you check your attempt?

Reading

- <u>Read Alouds/D.E.A.R.</u> Students can make prediction charts based on a reading selection.
- <u>Turn to Your Partner and Buddy Buzz</u> Students can discuss predictions, character feelings, plots/ problems and story endings with their partners.
- <u>Suggested Reading</u> Do You Wanna Bet?, Pumpkin, Pumpkin and Number Families.

Math

- <u>Strategy</u> When estimating (addition, subtraction and multiplication) students can make reasonable guesses of possible answers (Note: This should followed up by having your students check their estimated answers).
- <u>Division</u> In word problems or division computation problems students estimate a given quotient.

Writing

- Graphic Organizers Students can create a "Wonderings & Guesses" (Prediction Chart) to stimulate discussions based on a story
- <u>Partner Work</u> Students can create prediction charts based on a reading selection, the chart should include the following:

Title_____Author____
Guesses/ Reasons / Evidence