

Autism

ELA Interventions

Cathy Longstroth
cathyl@updc.org

Objectives

- **Know how autism affects writing and reading comprehension**
- **Know and be able to use proven strategies for expressive writing and comprehension**

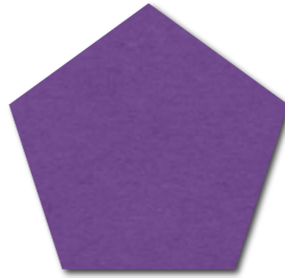
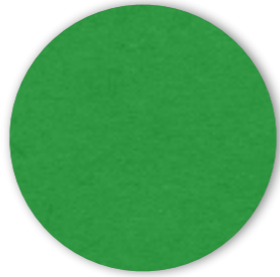
Characteristics of autism are thought to stem from an inability of areas of the brain to **connect** with other areas

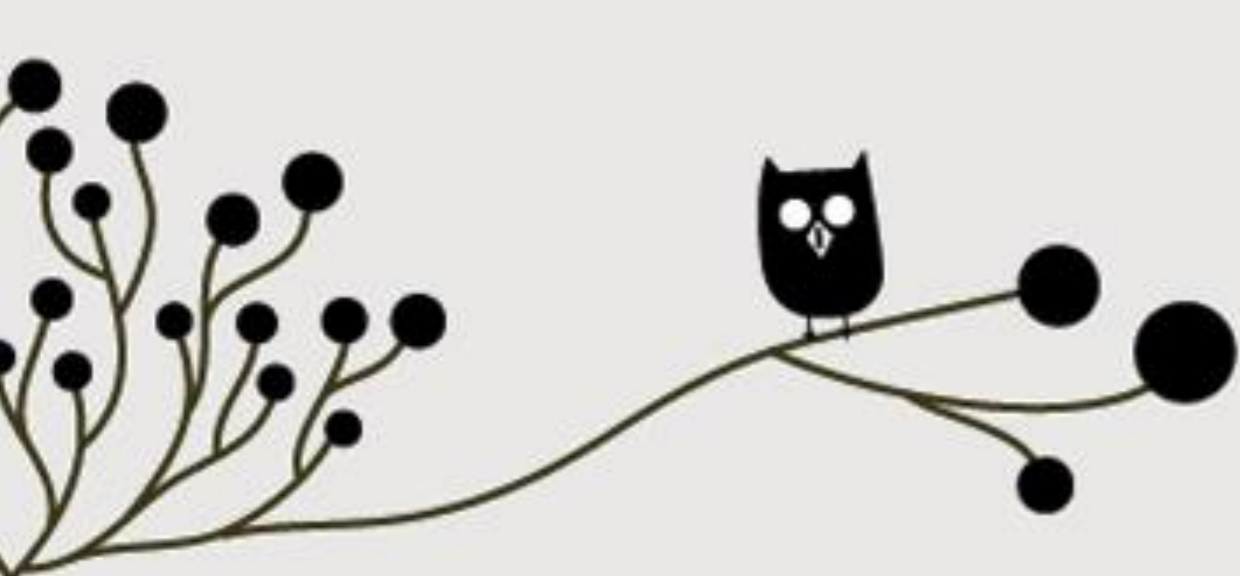
The effects of autism on
the brain generally
produce **strengths** and
challenges.

Autism As a Disorder of Information Processing

Intact or Enhanced	Cognitive Challenges
Sustained Attention Simple Memory Formal Language Rule Learning Visual	Complex Motor Complex Language Organization Sensory Processing Auditory Processing Flexibility Problem Solving

Mineshew and Williams, 2007





Everyone is a genius.

**But if you judge a fish
on its ability to climb a tree,
it will live its whole life believing it is stupid.**

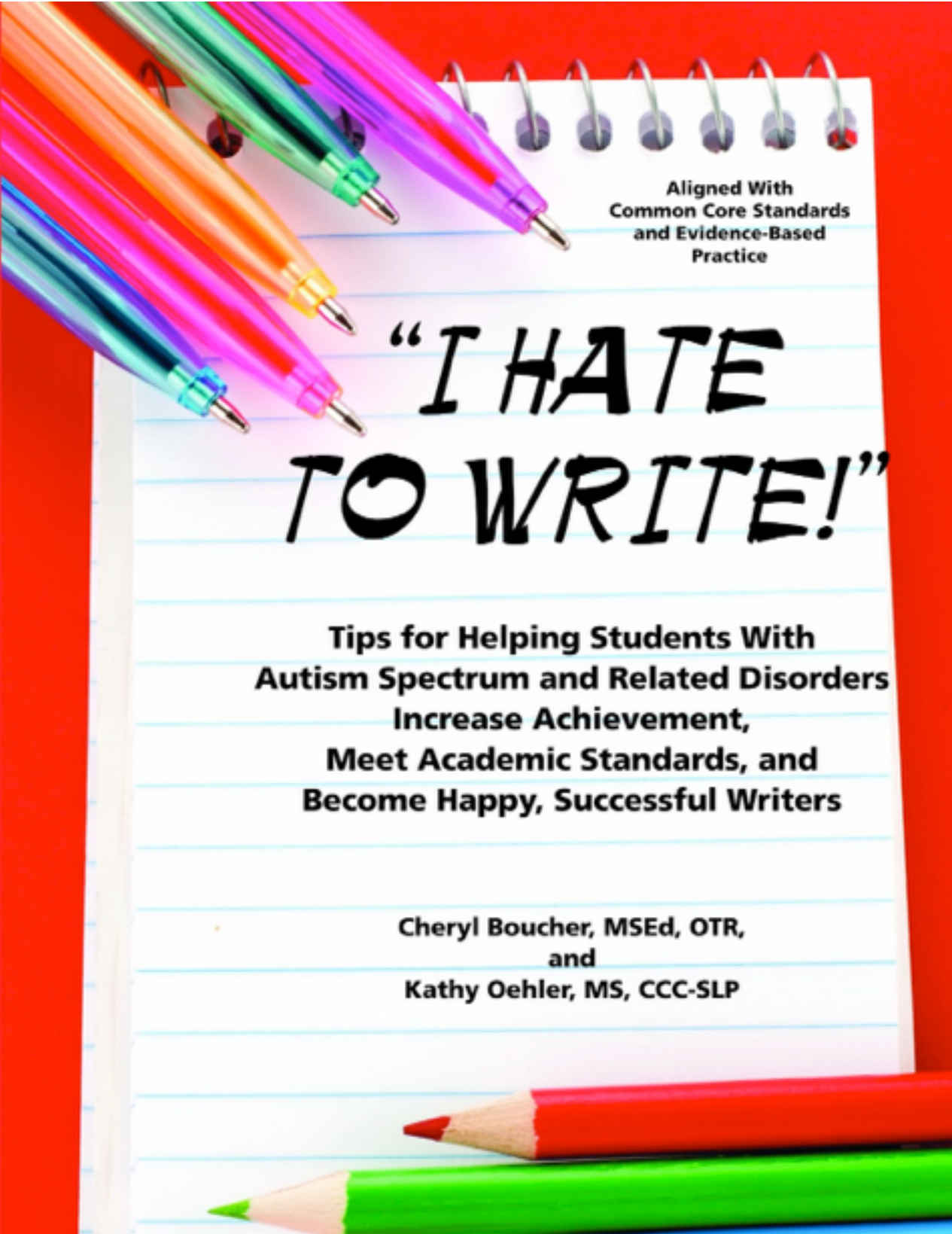
~ Albert Einstein



Autism As a Disorder of Information Processing

Intact or Enhanced	Cognitive Challenges
Sustained Attention Simple Memory Formal Language Rule Learning Visual	Complex Motor Complex Language Organization Sensory Processing Auditory Processing Flexibility Problem Solving

Mineshew and Williams, 2007

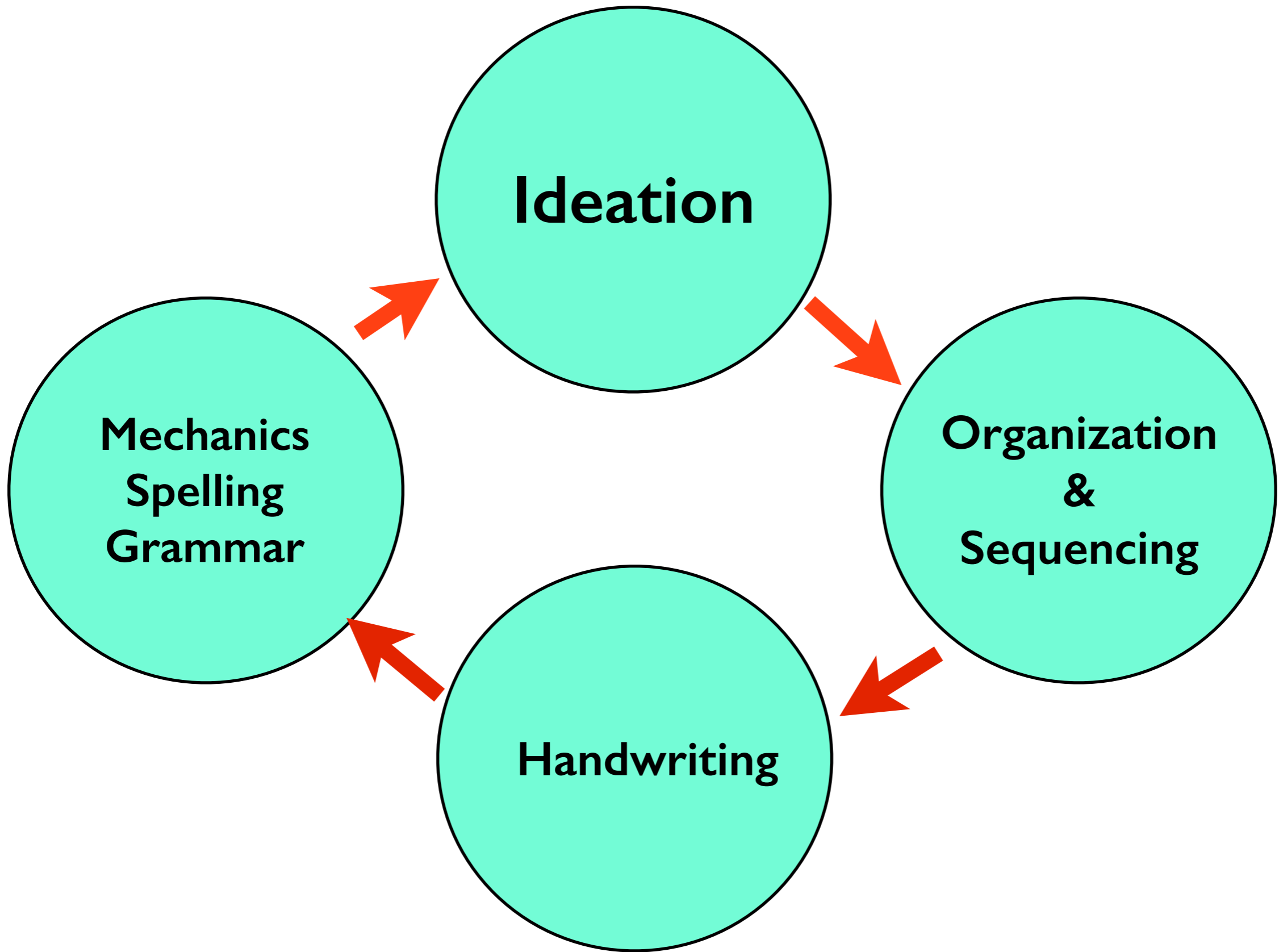


Aligned With
Common Core Standards
and Evidence-Based
Practice

“I HATE TO WRITE!”

**Tips for Helping Students With
Autism Spectrum and Related Disorders
Increase Achievement,
Meet Academic Standards, and
Become Happy, Successful Writers**

Cheryl Boucher, MEd, OTR,
and
Kathy Oehler, MS, CCC-SLP



Frustration & Refusal

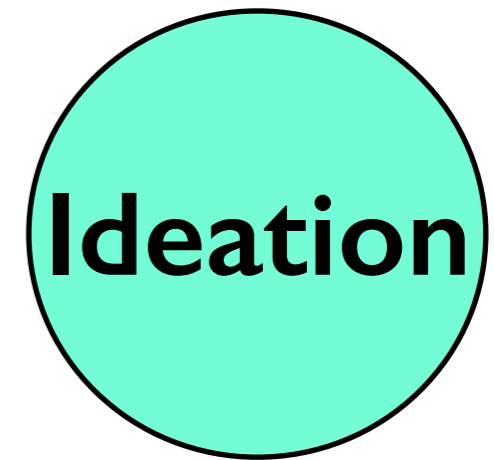


Ideation

- Mindset: Writing as an aversive situation
 - Change the writing environment or routine.
Relaxed atmosphere
 - First - Then with reinforcer
 - Visual timer or kitchen timer
 - Possibly use area of interest

Kathy Oehler

Ideation

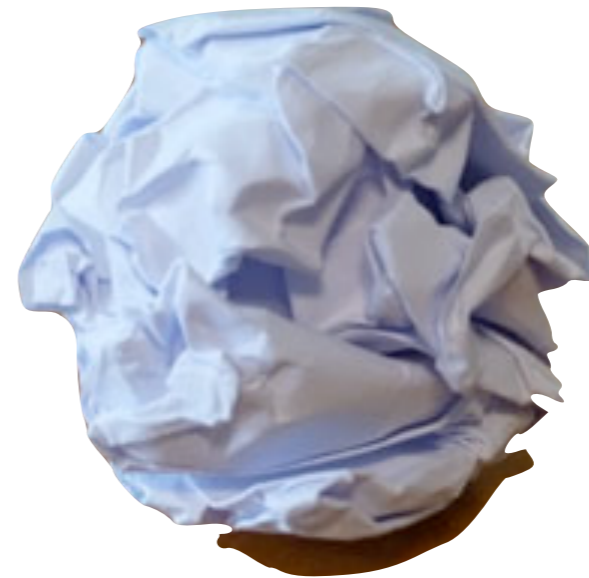


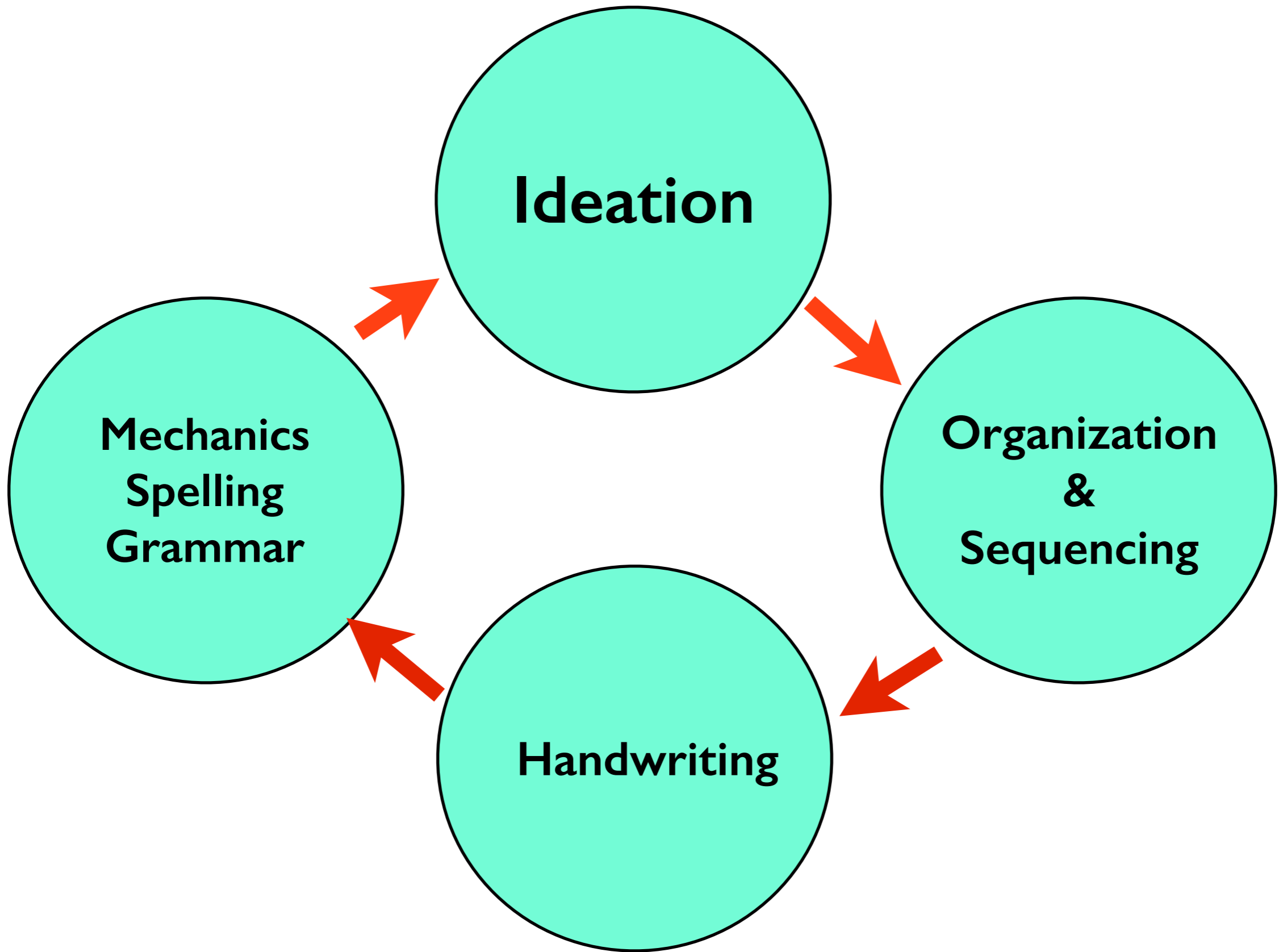
- Start with a relaxed atmosphere
- May start with area of interest - but be careful! Branch out from the area of interest
- Ask questions and brainstorm to get the thought process going

Getting Stuck

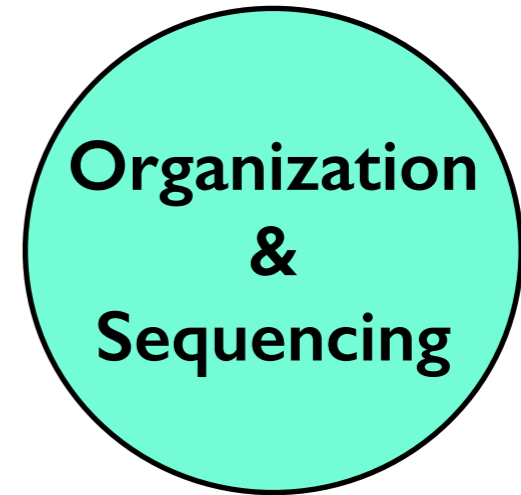
Ideation

- Perfectionism
- Concrete thinking
- Perseveration - Use a story frame





Getting Started



Younger student - Get started with hand-over-hand support

Older student - Go to writing table, Do sensory warm ups.
Write the first word or sentence for him.

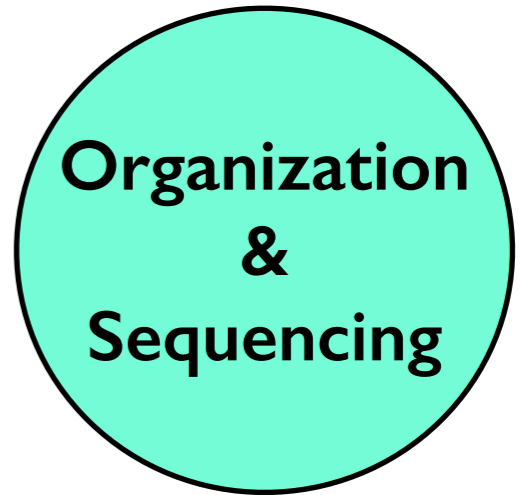
Brainstorm words or phrases first

Give very concrete instructions, one at a time.

Use graphic organizers

Kathy Oehler

Knowing What to Write



“Sequential thought is often a big challenge for students with ASD. Just as they have difficulty with organizing their supplies, they also have trouble organizing their thoughts into logical sequence and order”

Kathy Oehler

Plot Chart for Short Story

Organization & Sequencing

Climax

Rising action and conflicts

Conflicts that are resolved during
falling action

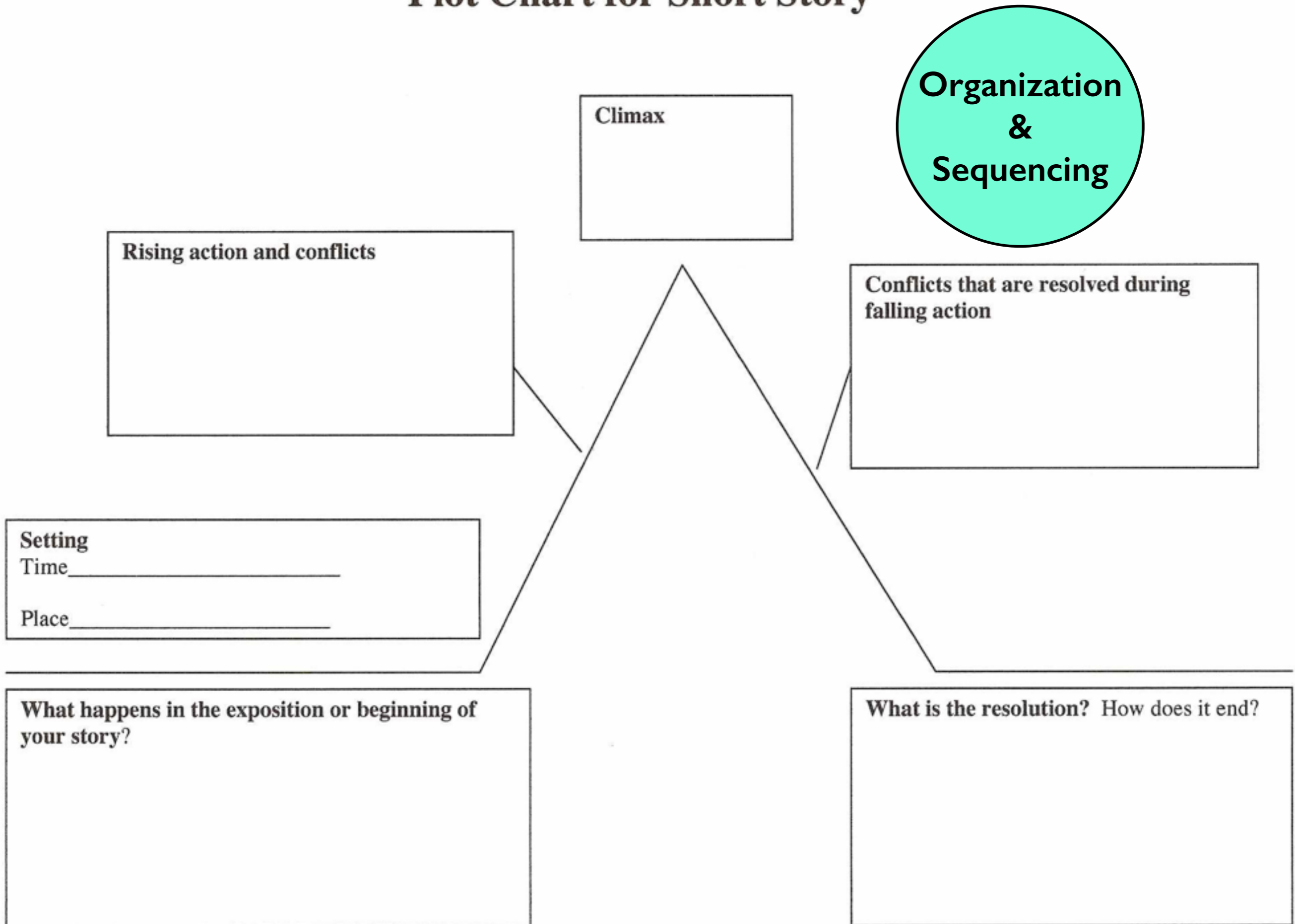
Setting

Time _____

Place _____

What happens in the exposition or beginning of
your story?

What is the resolution? How does it end?



Rising actions and conflicts

Wolf can't destroy brick house
Wolf destroys stick house
Wolf destroy straw house
Brick house built
Stick house built
Straw house built

Climax:

Wulf gets
toasted down
the chimney.

Conflicts that are resolved
during the **falling action**.

Pigs clean up the chimney

Setting

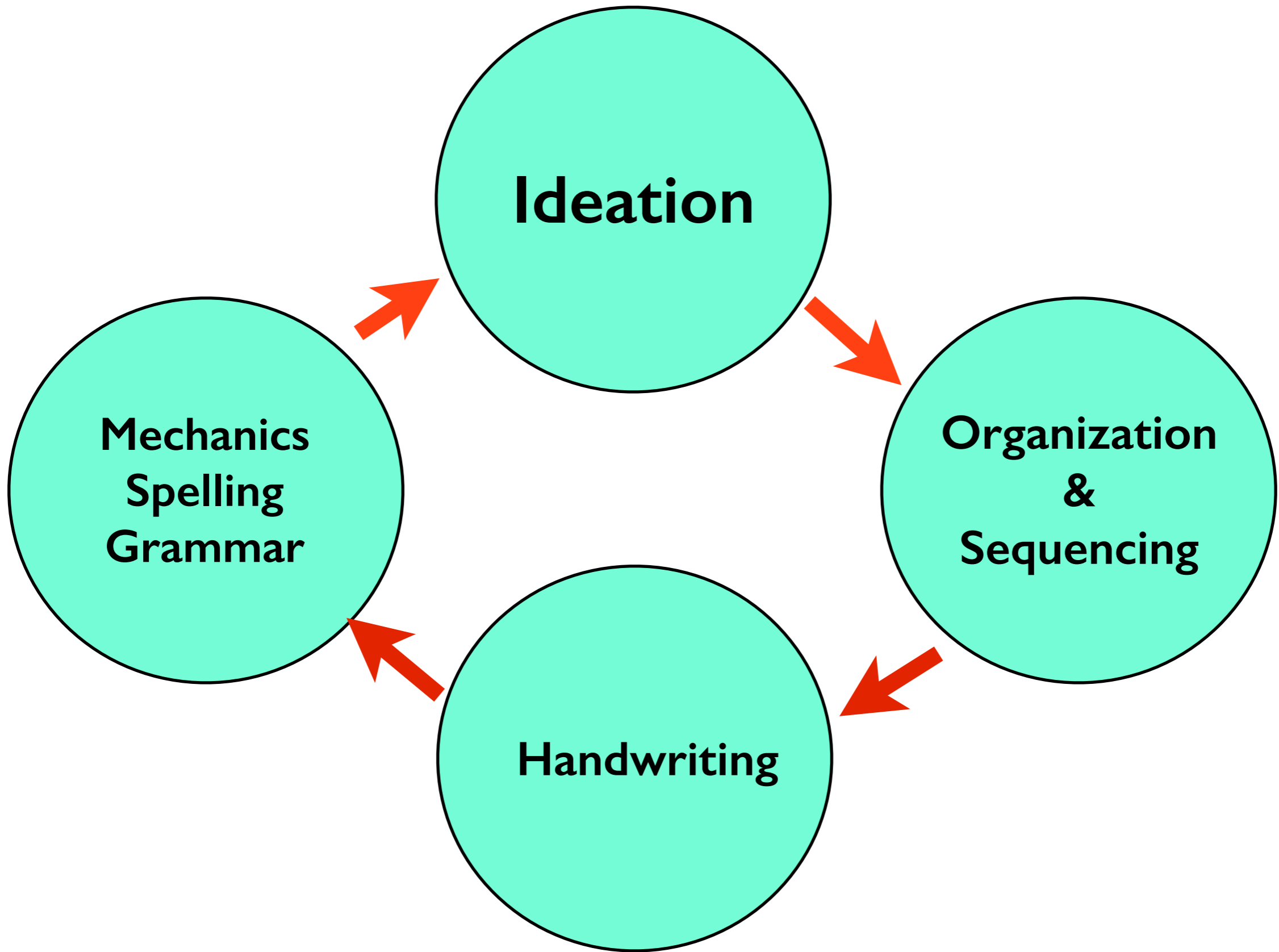
Time: Not specific
Place: Country

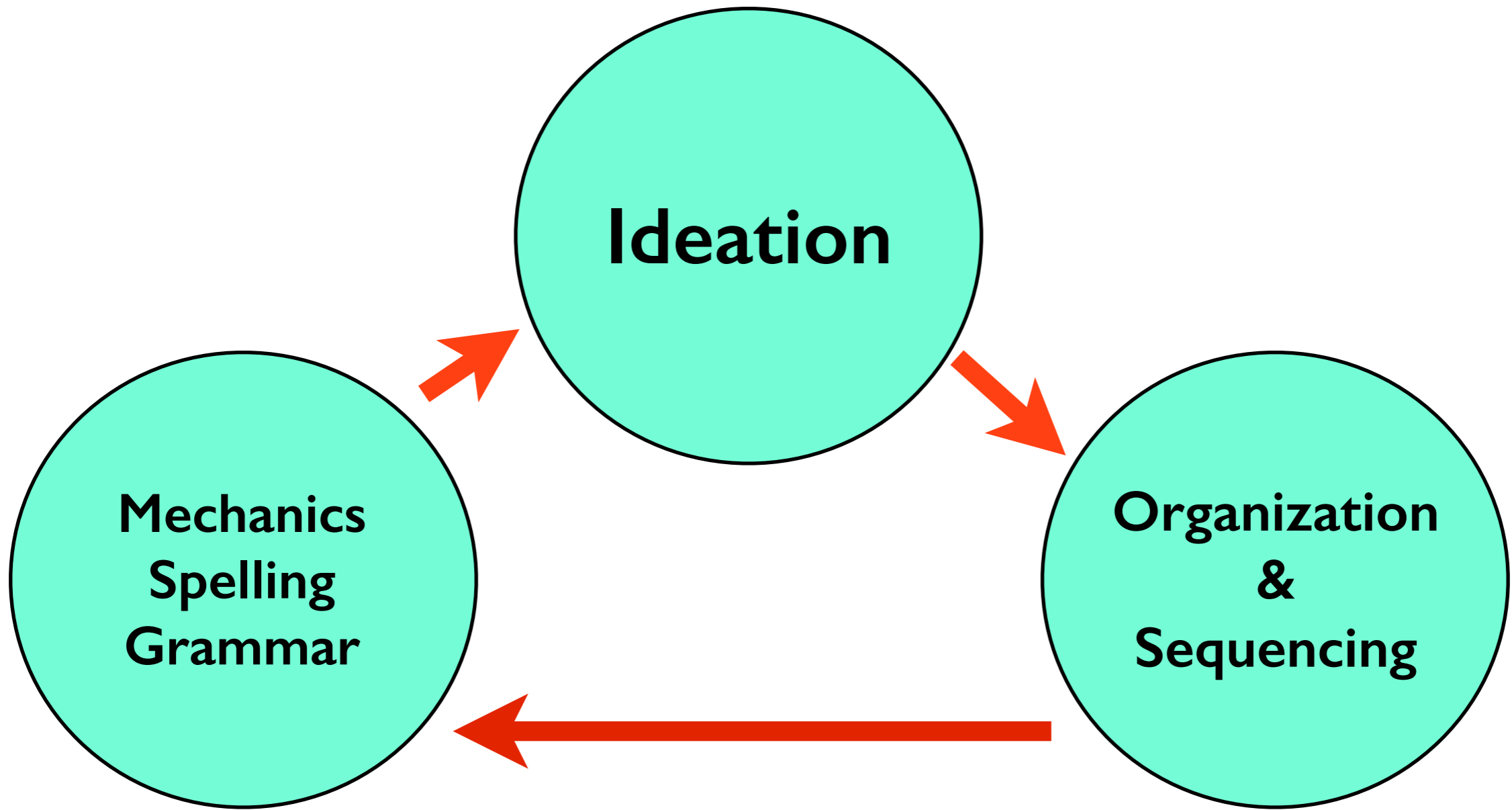
What happens in the **exposition** or
beginning of the story?

Pigs move out of their mother's
house.

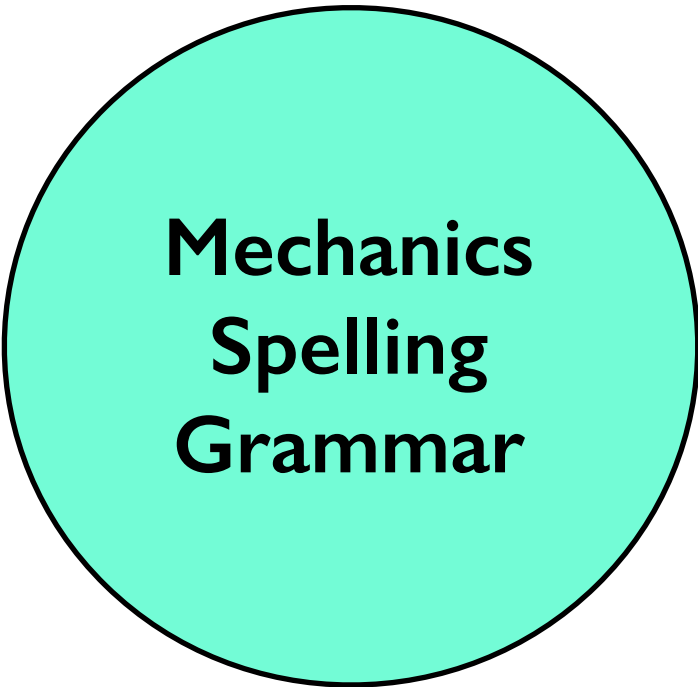
What is the **resolution**? How does
it end?

Pigs have the best supper ever and
live happily ever after.





- So this thing about text to speech you know is that it's really showing up about everywhere I do text to speech on my phone h tha anyway yeah I saw her to show you how easyy sorry I do speech to text all the time on my phone sorry honey



Mechanics
Spelling
Grammar

selUr gnitirW

- #tfEl oT thGir moRf etirW •
- #deSu eB tSum eciOv evissaP •
- noitseUq A ,# A hTiw tnemetaTs A dNe syawLA •
- #@ nA hTiw noitamalcXe nA dNa ,% A hTiw
sElur noitazilatiPac rebmemEr esaelP •
(dN2 ,ts1 ,.e.i.)

Karen Erickson

Writing Rules

- Do not follow the rules we just employed.
- Follow whatever rules you know and are comfortable with.
- Write for 2 minutes

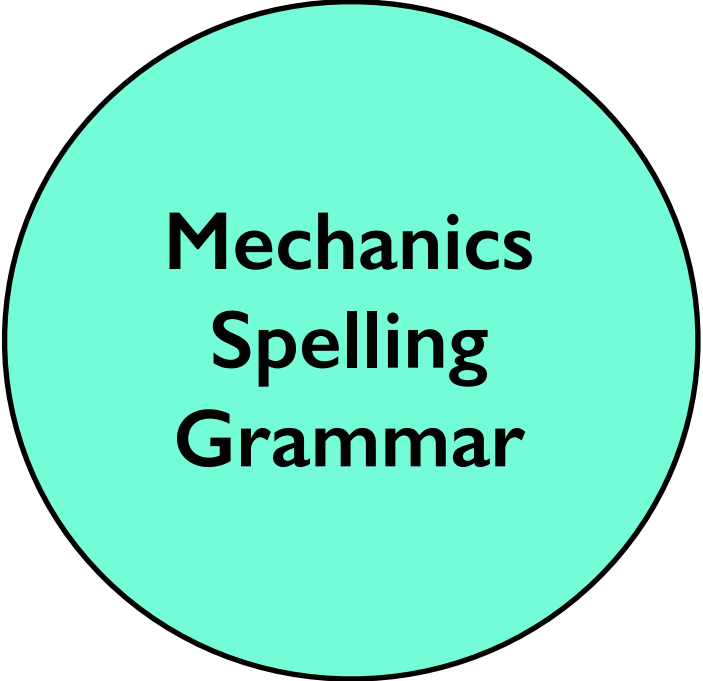
Karen Erickson

A Comparative Analysis

- Rules
 - number of words
 - confident/concerned
 - enjoyed/disliked
 - ease/difficulty
- Free Write
 - number of words
 - confident/concerned
 - enjoyed/disliked
 - ease/difficulty

Karen Erickson

Revising and editing



Mechanics
Spelling
Grammar

- Rigid Thinking -
 - Take a break before editing
 - Use an editing checklist
 - Use a computer to help with editing

Editing Toolkit



GREEN

Spelling



ORANGE

Punctuation



YELLOW

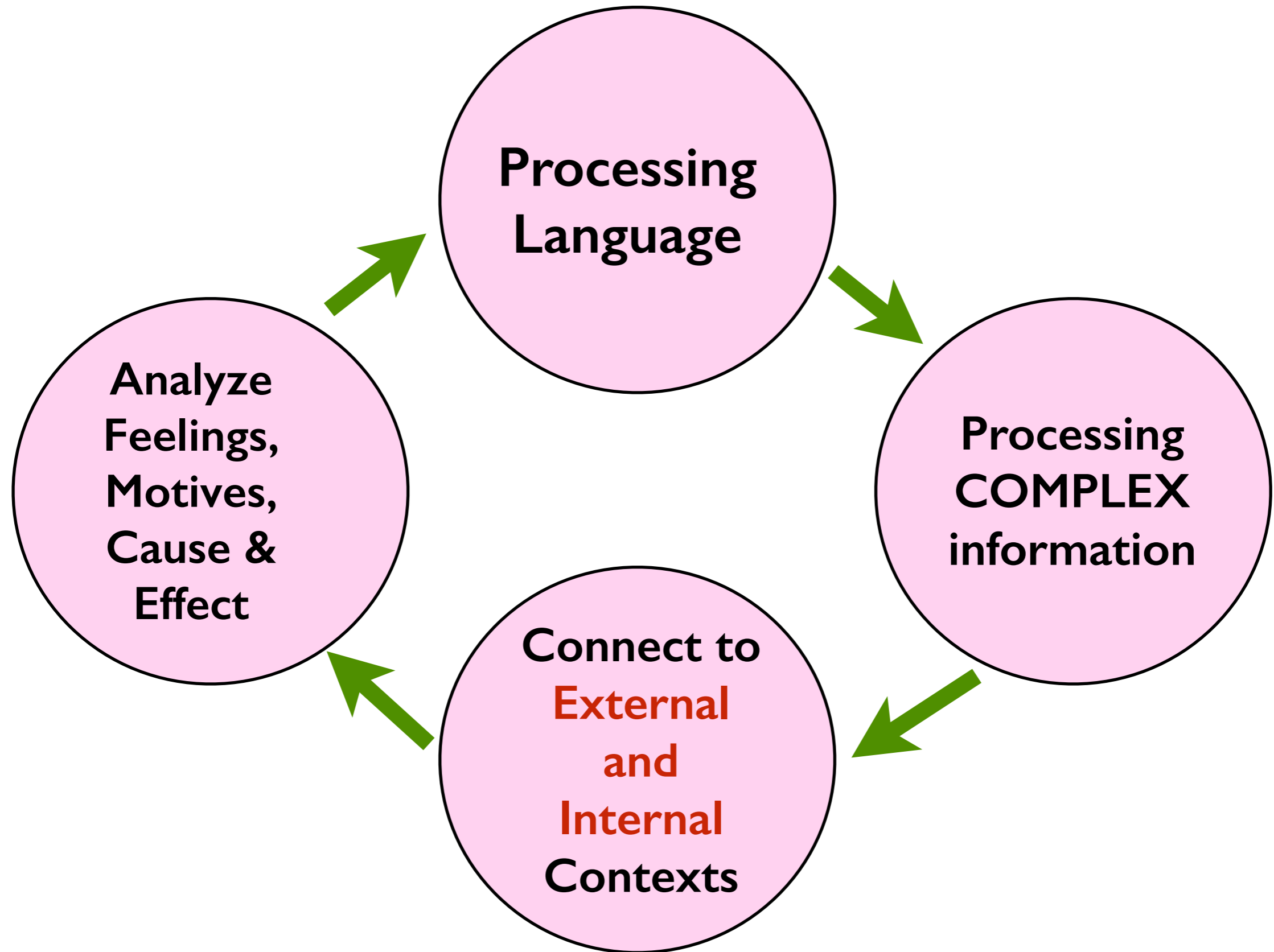
Capital Letters



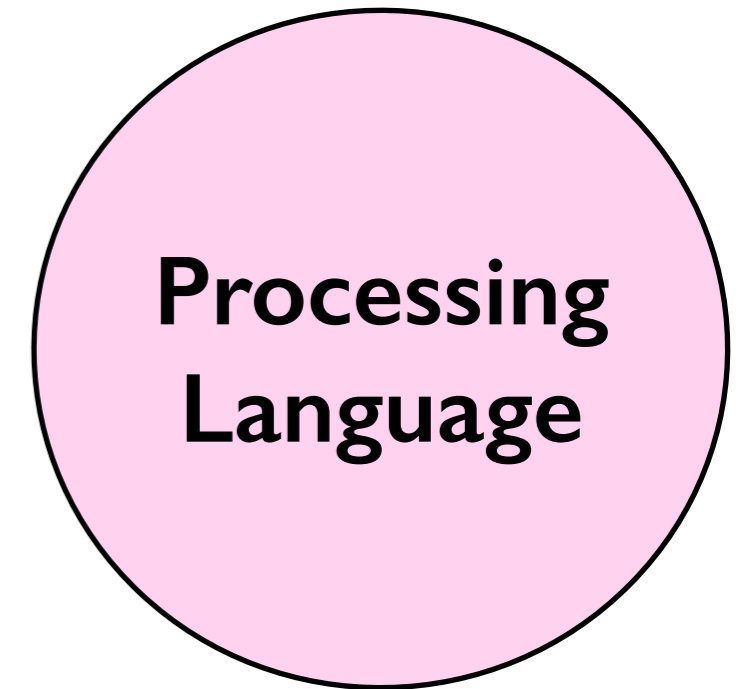
BLUE

Indenting

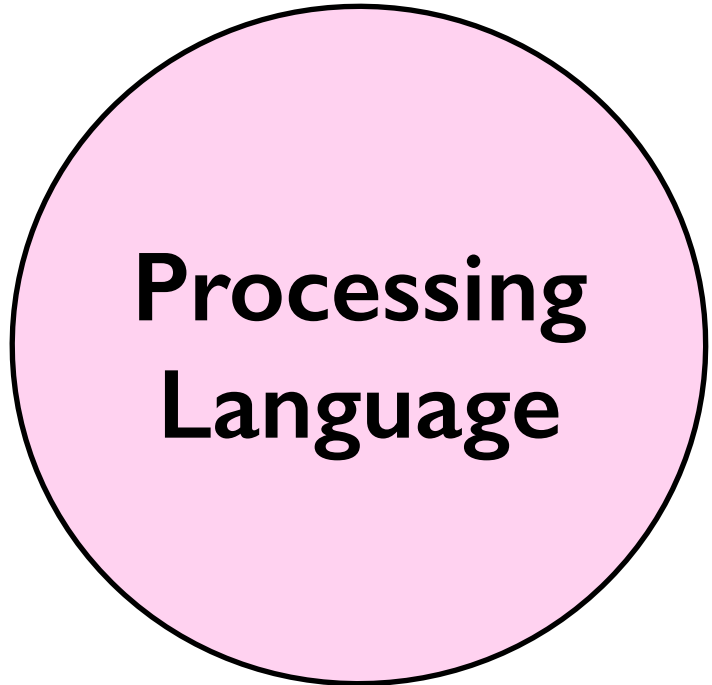
Comprehension



Comprehension Components Related to Autism

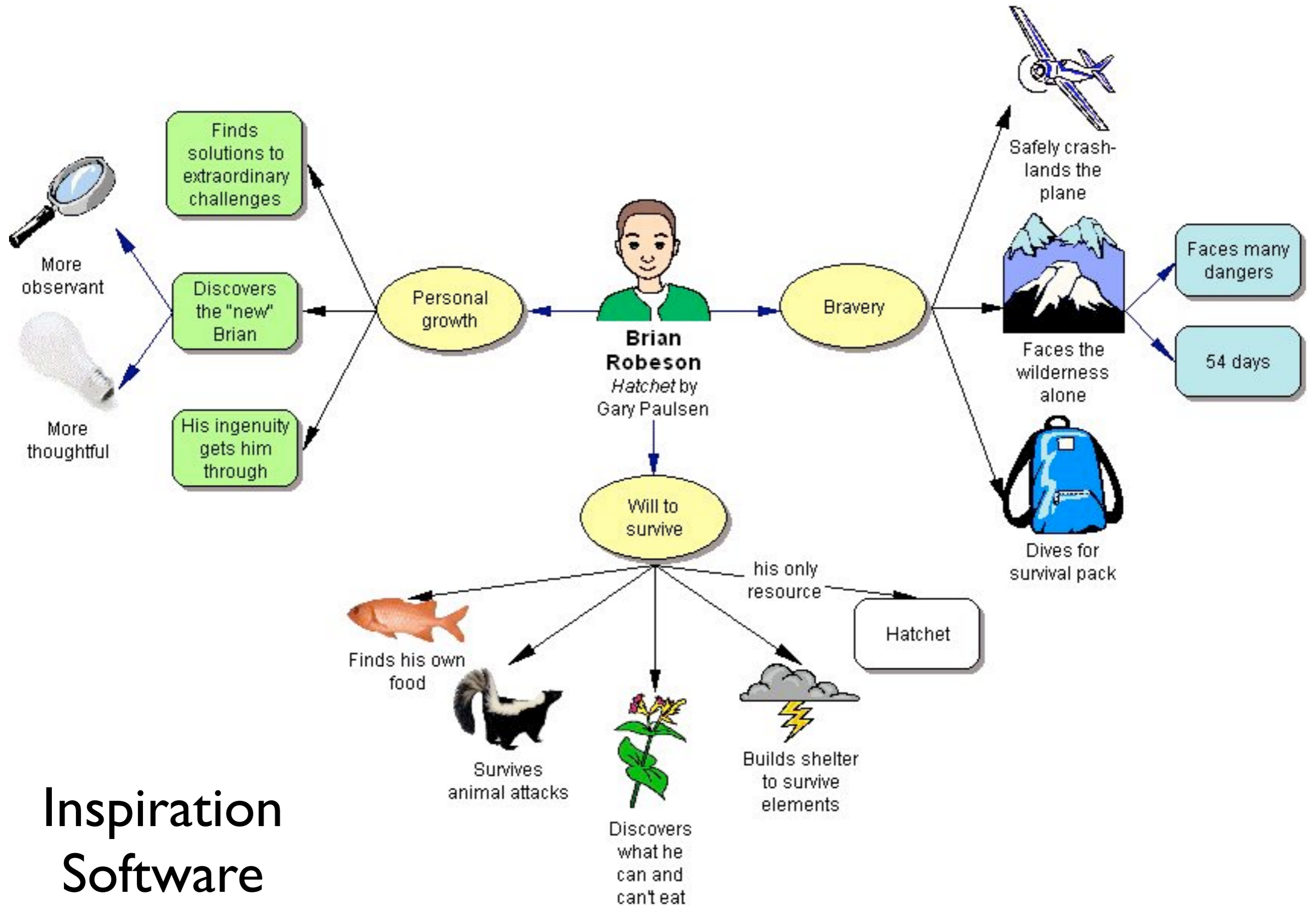


- **Control the environment**
- **Increased time**
- **More repetition**
- **Stressing the structure of narrative and informational text**

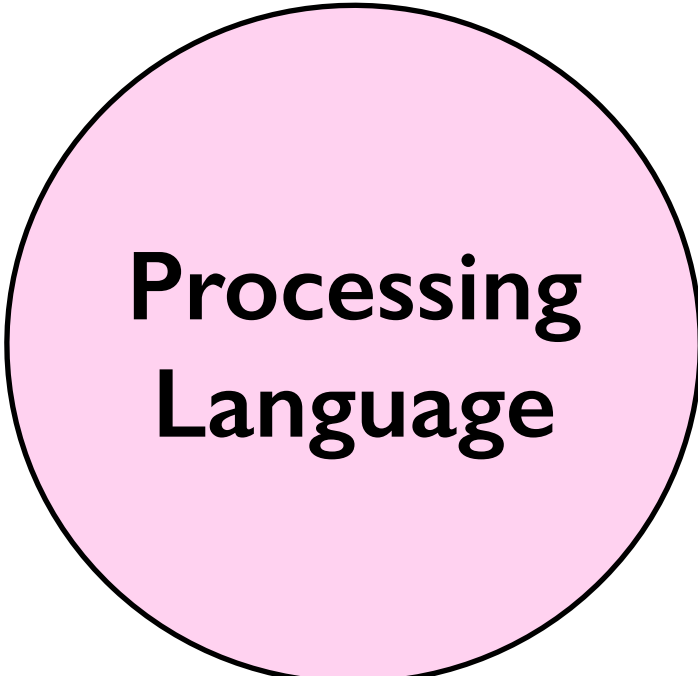


**Processing
Language**

- **Visual support**
 - **Pictures**
 - **Graphic Organizers**
 - **Video (before reading)**



Inspiration
Software



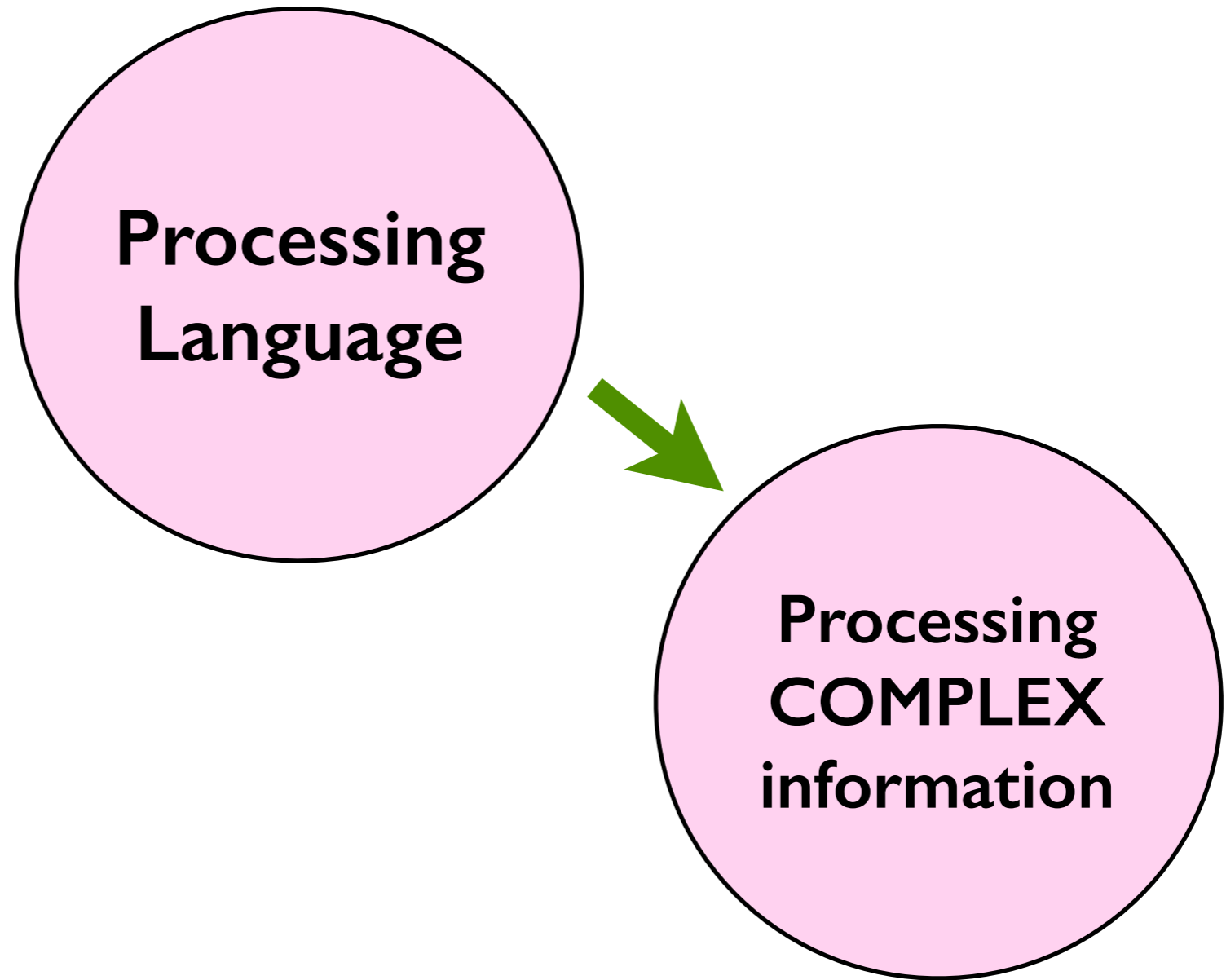
**Processing
Language**

- **Prime - set the stage and have them look for important and relevant information**
- **Provide reminders (sticky notes)**

Sticky Note Reminders

- Symbol Reminders to
 - Take notes on the setting
 - Make a prediction
 - Etc.



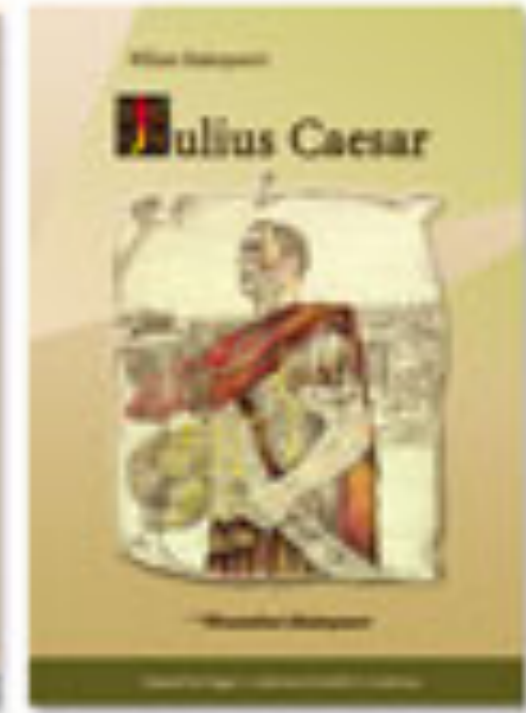


Comprehension Components Related to Autism



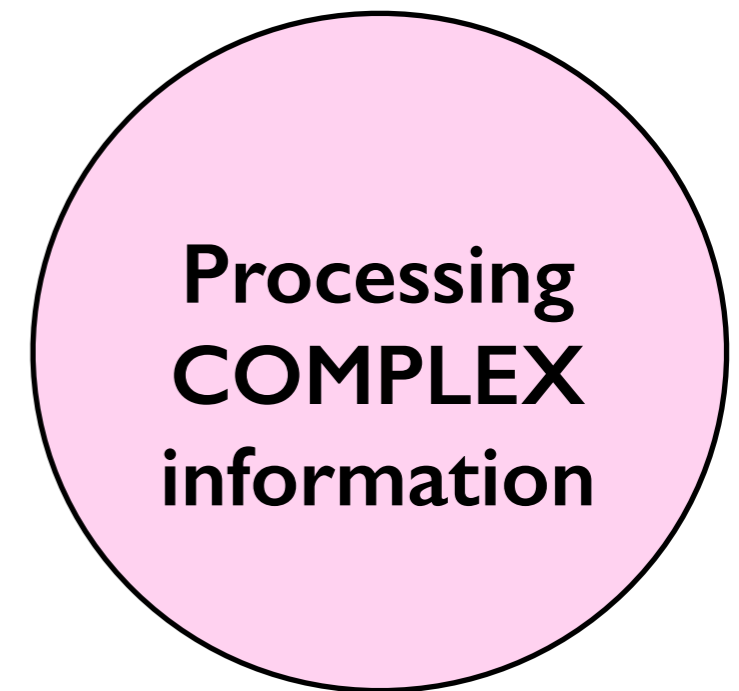
Processing
COMPLEX
information

- Use stair-step or apprentice texts
- Identify the antecedents to pronouns
- Simplify the text
- Guide students to find the subject and verb



Use Stair-Step or Apprentice Texts

Texts may be hard because of
grammar or syntax



- Explain clearly using at least three different reasons or drawing three diagrams why McClellan lost the battle.
- Explain clearly why McClellan lost the battle. Give at least three reasons or draw three diagrams.

Timothy Shanahan



Processing
COMPLEX
information

- Guide students to interpret complex sentences (clause and phrase analysis)
- In dense pros, help find the subject and verb:
 - *“However, on August 24, 2006, the International Astronomical Union (IAU), a group of individual astronomers and astronomical societies from around the world, made an announcement.”*



Processing
COMPLEX
information

- Guide students to interpret complex sentences (clause and phrase analysis)
- In dense pros, help find the subject and verb:
 - *“However, on August 24, 2006, the International Astronomical Union (IAU), a group of individual astronomers and astronomical societies from around the world, made an announcement.”*

Who was the sentence about?

the International Astronomical Union (IAU)

Who are they?

a group of individual astronomers and astronomical societies from around the world

What did they do?

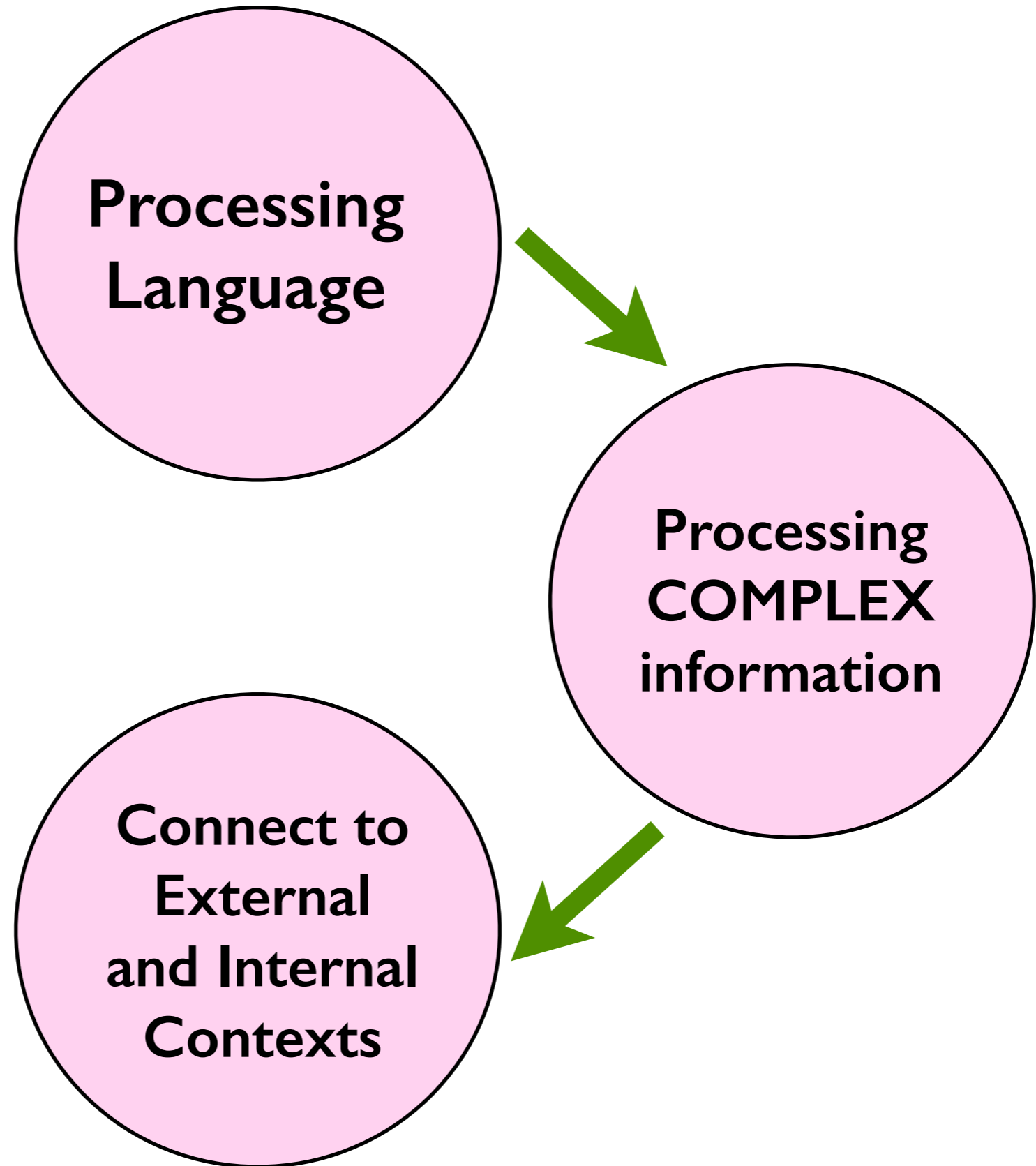
made

Made what?

an announcement

When?

on August 24, 2006



Internal Context
Ideas, knowledge,
experiences, feelings ,etc.

External Context
Information in the text

The sea tastes like salt and . . .

You can hunt with a knife
and . . .

The night is black and . . .

Peter Vermeulen, 2013

**The man steps into his car and
starts the . . .**

**She said visiting relatives
can be a nuisance.**

Peter Vermeulen, 2013

The woman liked to keep
her house tidy.

She said visiting relatives
can be a nuisance.

The woman hated
traveling.

She said visiting relatives
can be a nuisance.

“Lily opened the door and saw that Jumper was no longer in his cage. Crying, she walked over to her mother, who told her, “He will not fly far away and will come back.”

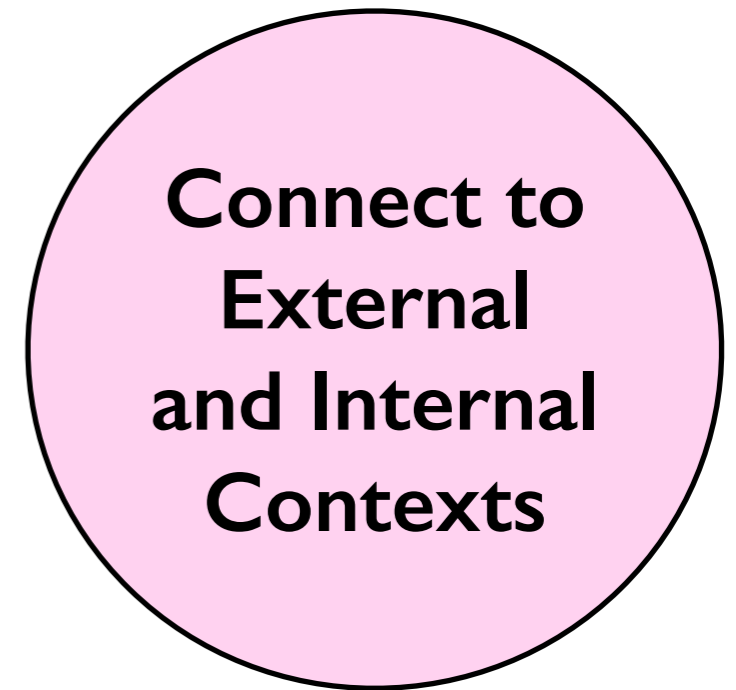
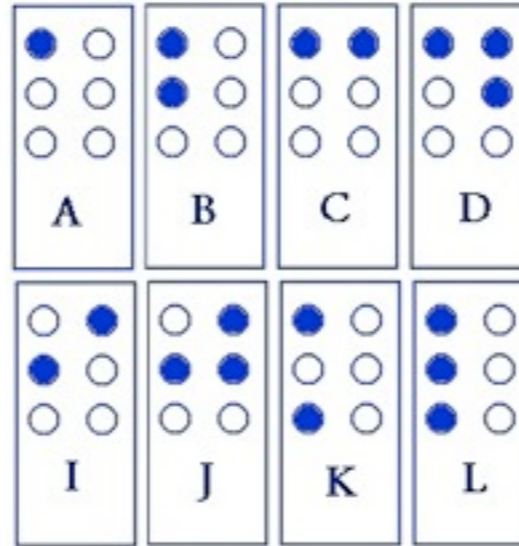
Peter Vermeulen, 2013

Anaphoric Cueing

Processing
COMPLEX
information

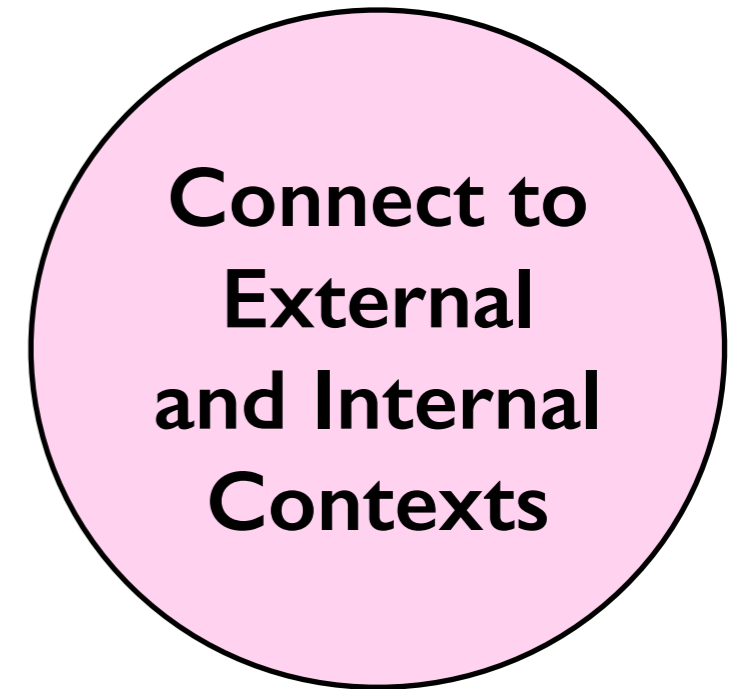
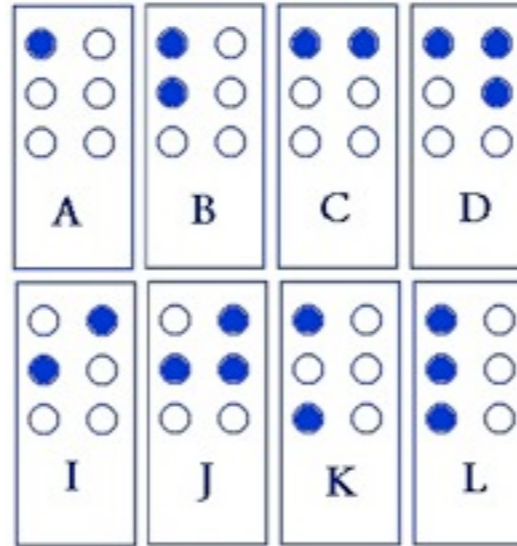
- Texts can be hard because the relationships and connections may be unclear to the readers
- *The killer whale tosses the penguin into the air and generally tormented it's prey before it eats it.*
- *The killer whale tosses the penguin into the air and generally torments penguin before eating it.*

Context Braille



- Ask questions
- Pre-teach confusing vocabulary, idioms, and metaphors
- Use graphic organizers
- Use visual supports

Context Braille

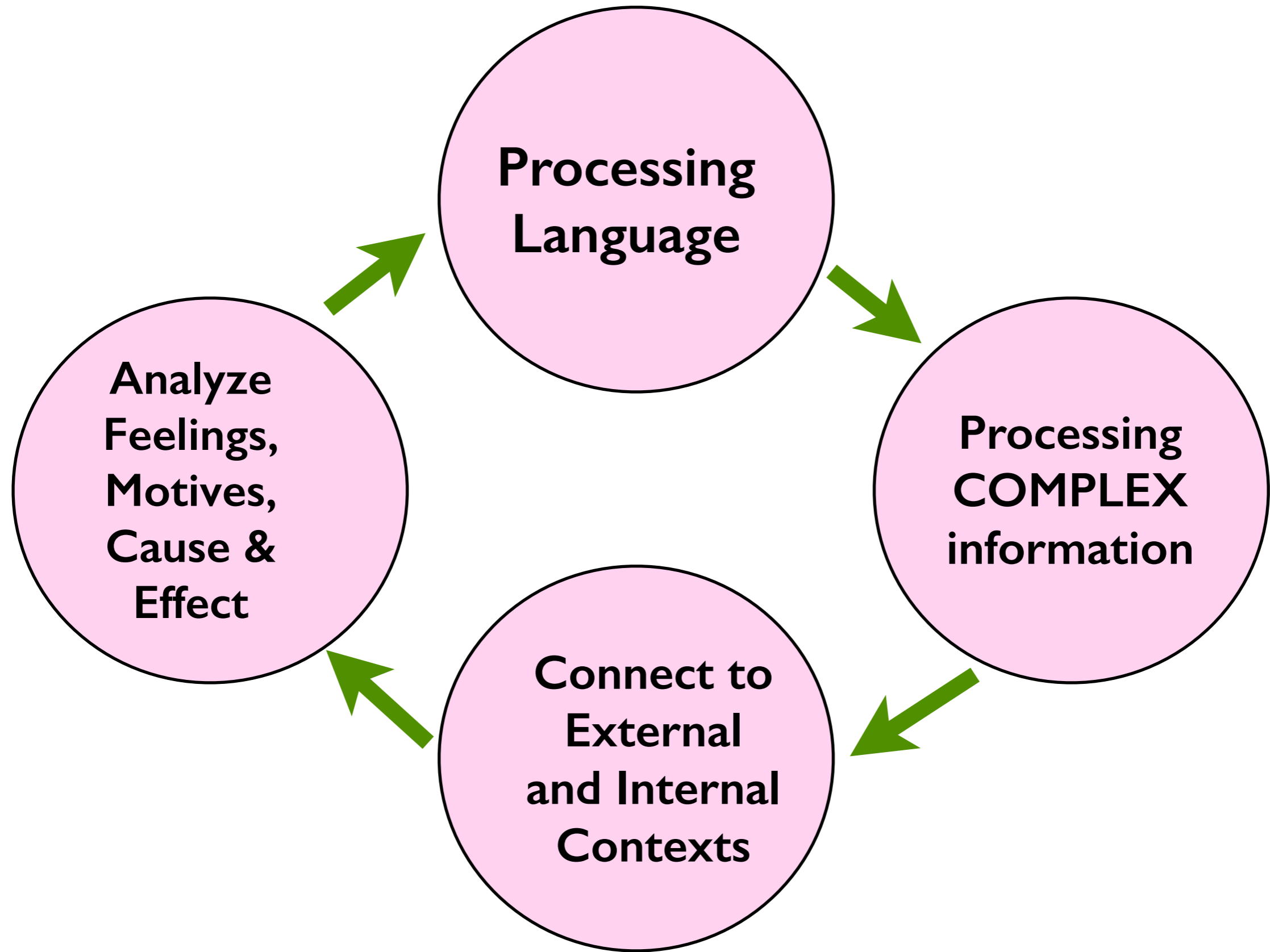


- Guide student in linking to **relevant** background knowledge (teach relevant and irrelevant)
- Teach to self-monitor comprehension
- Explicitly teach how to focus on words and sentences in a paragraph to find clues to the meaning

Push the Context Button

Connect to
External
and Internal
Contexts






Comprehension Components Related to Autism

Theory of Mind

John and Mary are playing in the living room. Mother comes back from the store. They expect they will get a treat. John thinks that he will get a a candy bar. Mary thinks that she will get a lollipop. Mother enters the room and both children get a chocolate bar. How does John feel? How does Mary feel?

Peter Vermeulen, 2013



**Analyze
Feelings,
Motives,
Cause &
Effect**

- **Reciprocal teaching**
- **Visual support**
- **Ask questions**

Reciprocal Teaching

- **National Reading Panel Report - Question generation is the single most effective reading comprehension strategy.**
- **Question, summarize, clarify and predict**

”It seems that
for success
in science or art
a dash of autism
is essential.”

~ Hans Asperger