The Four Stages of Inquiry and Research: A Student Guide
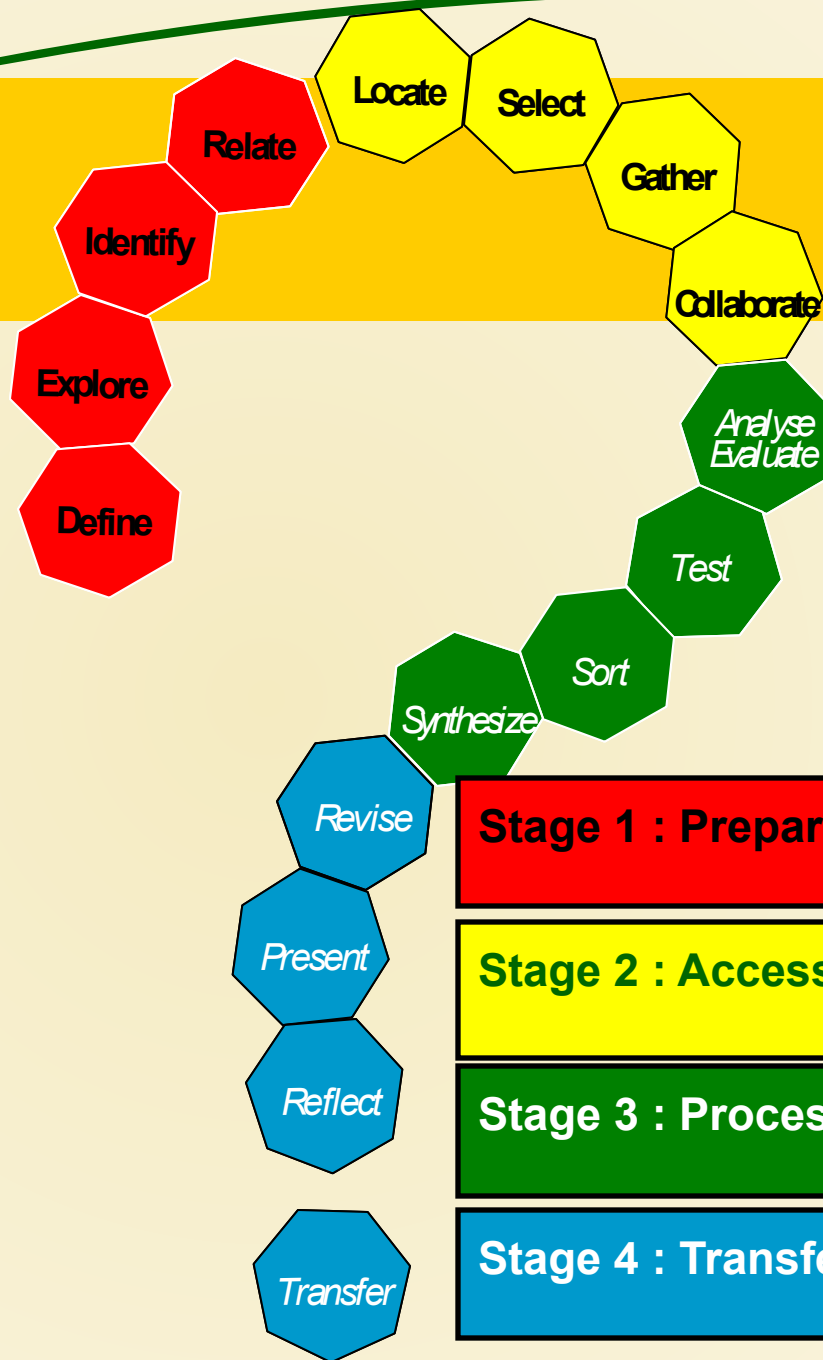
1. Preparing for Research
2. Accessing Resources
3. Processing Information
4. Transferring Learning

The Process of Inquiry and Research

OSLA MODEL

Relate

Locate

Select

Gather

Identify

Collaborate

Explore

Analyse
Evaluate

Define

Test

Sort

Synthesize

Revise

Present

Reflect

Transfer

Stage 1 : Preparing for Research

Stage 2 : Accessing Resources

Stage 3 : Processing Information

Stage 4 : Transferring Learning

STAGE 1 ~ PREPARING FOR RESEARCH

↳ *Define*

↳ *Explore*

↳ *Identify*

↳ *Relate*

Stage 1 ~ Preparing For Research

- *Define research requirements*

  - What does the assignment require? When is it due? What are the sub-tasks required? How will my learning be communicated/presented? How will I be evaluated?

- *Explore a topic*

  - Brainstorm / talk / mind map / word map / cluster / focus

- *Identify questions you want to answer*

  - A search for answers guides research / leads to a thesis

- *Relate keywords*

  - Cluster search terms into concepts / topics. Spelled correctly?

STAGE 2 ~ ACCESSING RESOURCES

↳ *Locate*

↳ *Select*

↳ *Gather*

↳ *Collaborate*

Stage 2 ~ Accessing Resources

Successfully access a wide variety of resources

↗ What **keywords** string together for successful searches?

↗ What **tools** can be used to access resources?

↗ What information sources **match** your inquiry needs?

↗ What are the **best** and **most suitable resources**?

STAGE 3 ~ PROCESSING INFORMATION

- ⭐ *Analyze /Evaluate*
- ⭐ *Test*
- ⭐ *Sort*
- ⭐ *Synthesize*

Stage 3
PROCESSING INFORMATION

Key Questions

1) How do I **identify information** that is **relevant**?

2) How do I **extract relevant** information?

3) What are the **qualities of good** notes?

4) What is **honest** use of information?

5) What is **dishonest** use of information?

Before you start processing

Review your assignment again!

↳ Are you sure you know what the assignment requires?

- Review the length and scope of the assignment.
- Review the due dates.
- Review how you will be evaluated.

↳ How will you **present the results** of your research?

Before you start processing

- **Review the mission of your task again!**

- **Review Stage 1:** *Preparing*

  ↳ What is your Focus - **topic** and **research question**?

  ↳ What did an **overview** tell you about your topic?

  ↳ How did you break your topic into **smaller parts**?

  ↳ Did you have to choose a **thesis** to research?

Before you gather information

- **Review Stage 2:** *Accessing Resources*

- **Look over the list of possible resources.**

  -Books   -Newspapers   -Internet

  -Online Databases   -Experts   -Places to visit

  ↳ What information sources **matched** your info needs?

  ↳ What were the **best** and **most suitable resources**?

THINK CRITICALLY

⮱ **Question the <u>relevance</u> of the information.**

⮱ **Question the <u>accuracy</u> of the information.**

⮱ **Question the <u>authority</u> of the information.**

⮱ **Question the <u>point-of-view</u> of the information.**

⮱ **Question the <u>fairness</u> of the information.**

<u>AS YOU</u>

☺ **LISTEN**

☺ **OBSERVE**

☺ **READ**

☺ **VIEW**

☺ **REFLECT**

ACTIVELY INTERACT WITH THE INFORMATION

What is the mission for your information search?

- **How do you decide what is relevant?**

- The information links directly to sub-topics.

- It fits into a note-gathering chart.

- Be prepared to skip what you don't need.

- Decide what is critical to your task.
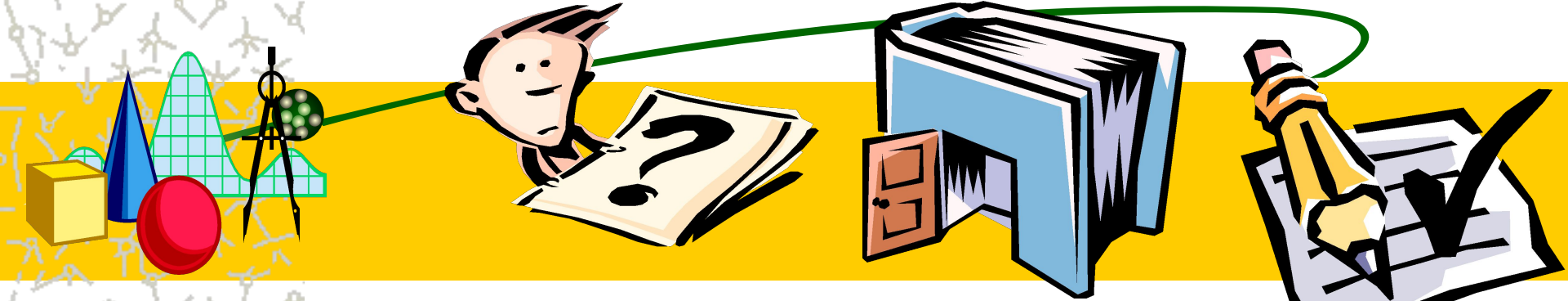
- Every note <u>must be</u> related to your task.
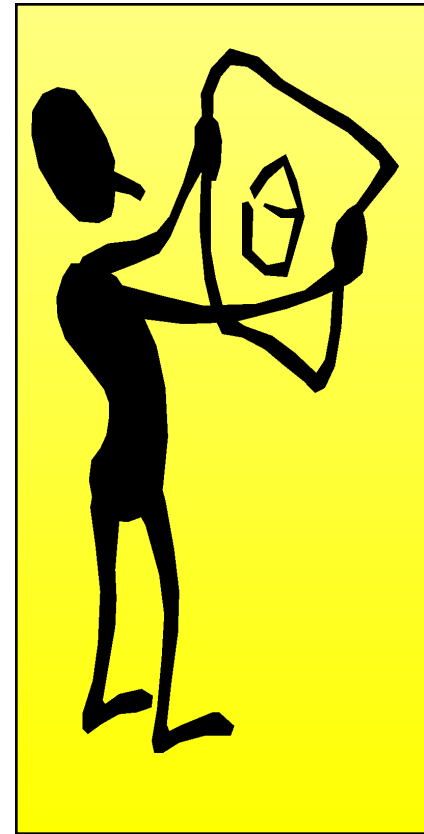
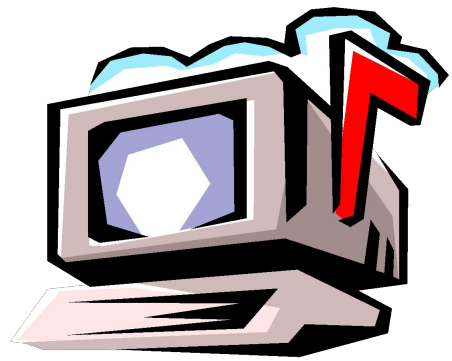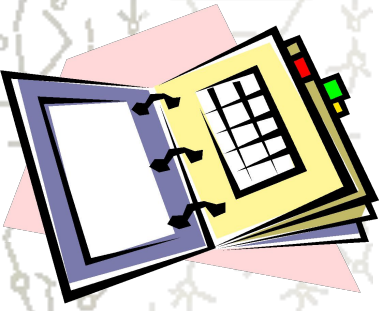# HOW TO RECORD INFORMATION

- Record from a selection of suitable resources:
  - videos, paintings, field trips, books, interviews, surveys, internet, electronic databases
- Record information in different ways:
  - quality jot notes, diagrams, graphs, charts, numbers, graphic organizers
- Record balanced views. Record main ideas. Record reflections.

RECORD ALL SOURCES!

You may own a note but not the source!

- **EVERY NOTE MUST BE RELATED TO YOUR INFORMATION NEEDS.**

- **RECORD YOUR OWN IDEAS AS YOU THINK OF THEM.**

IMPOSE LIMITS

- **There is a time to stop searching and recording.**

- **Review your progress and fill in any gaps.**

- **There is a time to start preparing your final product.**

In this era of *Information* learn to sift through masses of information to meet your needs.

HONEST USE OF INFORMATION

- Demonstrate critical **interactive thought.**
  - You may own the notes but not the source.
- **Record your own thoughts as you think of them**.
- Record all reference data, including page numbers.
- Select relevant quotations. Limit the number of quotations.
  - Copy accurately within quotation marks.
- **Paraphrase** and **summarize**. **Document** the source.
  - Do not alter the **sense** of the original.

Academic Honesty **demands that you document what you borrow.
(Plagiarism is failing to acknowledge the source.)**

INTERACT WITH THE INFORMATION RESEARCH AS AN ACTIVE THINKING PROCESS

- ☺ Think about, and say the information aloud.
- ☺ Have an argument with the author.
- ☺ Impose a limit of 8 words per information bit.
- ☺ Use post-its to record notes.
- ☺ Write in the margin of printouts.
- ☺ Record a visual 'note'.
- ☺ Record a mind-map that is colour coded.
- ☺ Record the information into an organized chart.
- ☺ Use skimming and scanning techniques.
- ☺ Record your own ideas and reflections.
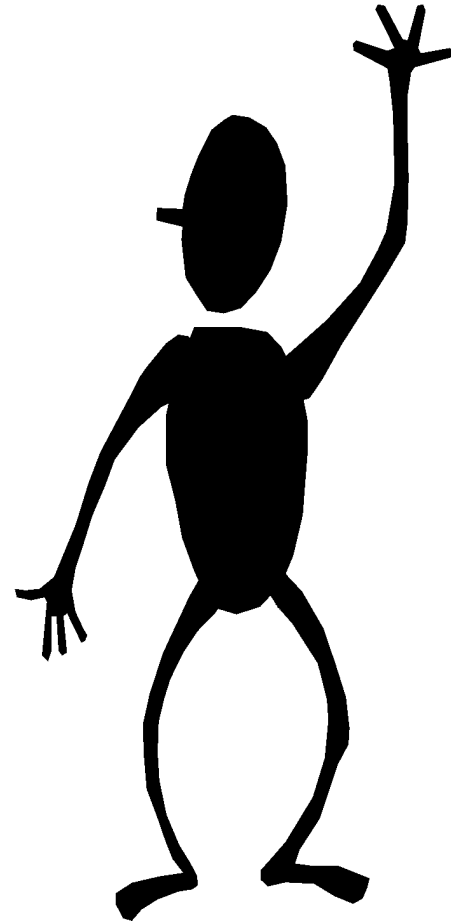- ☺ Discuss the information with different people.

STAGE 4: TRANSFERRING LEARNING

- *Revise*

- *Present*

- *Reflect*

- *Transfer*

Transferring Learning
Consider Needs and Constraints of:

- The assignment: requirements/evaluation
- Time: preparation/presentation
- Resources: equipment
- Format: visuals, oral, written, electronic /combination)
- Audio-visual aids
- Software tools/ techniques

- Tap strengths and interests
- Organize presentation
- Practice presentation skills: voice, gestures, eye contact,
- Demonstrate knowledge of topic based on solid research and thought
- Demonstrate use of communications technologies

Audience is the Key

Reflection: Building for Transfer

1) How well did I organize my research and time?
2) What were the main strengths of my inquiry?
3) What were the problems? How did I solve them?
4) Did I use all the resources I might have?
5) How well did I use computers for learning?
6) How well did I work with others? … on my own?
7) Did I document my sources accurately and correctly?
8) In what ways was this research important to me?
9) What new topics would I like to explore?
10) How will I apply what I learned to other inquiries?

Reflection: Building Lifelong Learning Skills

To become a lifelong learner, you must be able to:

- Recognize the need for information to solve problems and develop ideas

- Pose important questions

- Use a variety of information gathering strategies and research processes

- Locate relevant and appropriate information

- Assess information for quality, authority, accuracy, and authenticity

- Use information technology tools

- Format and publish in text and multimedia, adapting to emerging technologies