

Define

- ❑ **Understand the research process.**
 - How well do I understand the purposes of research?
 - How well do I understand the stages of research?
- ❑ **Understand the assignment.**
 - What do I have to do?
 - What is the final product, the audience, and the due dates?
 - How will it be evaluated?
- ❑ **Prepare a portfolio that organizes the process and the project.**
 - Did I consider time management with a research plan and timelines?
 - Did I include my notes, lists of resources, drafts, conferences, and records of my progress?

Explore

- ❑ **Explore the topic.**
 - Did I get an overview of my topic by using a variety of resources, including books, videos, experts, the Internet, and community resources?
- ❑ **Brainstorm.**
 - Did I consider my interests?
 - Did I share ideas with others?
 - Did I develop my ideas using maps or webs?
 - Did I classify ideas to look for patterns?
 - Did I break down the topic to help develop a focus?
- ❑ **Record the possible topics and subtopics.**
 - Is the topic manageable and meaningful?

Identify

- ❑ **Create research questions.**
 - Have I developed thoughtful questions that require research and analysis?
- ❑ **Develop search strategies.**
 - Have I developed keywords for searches?
 - Have I grouped the search terms together?
- ❑ **Form a focus statement.**
 - Can I state clearly what I am researching?
 - Do I understand why this topic is important to my audience and me?

Relate

- ❑ **Develop a K-N-R (Know, Need, Resources) chart.**
 - What do I wonder about the topic?
 - What do I know about the topic?
 - What do I need to find out?
 - What are the most appropriate resources for this topic?
- ❑ **Discuss research topics and plans.**
 - Have I talked to my peers and family about my ideas and progress?
 - Have I had a conference with my teacher or teacher-librarian?

Understanding the Assignment

Use this template to be sure you understand your assignment. Remember to check more than one box under Format, Purpose, and Details if your assignment requires it.

Course: _____

Topic: _____

Format

Written	Oral	Audiovisual/Multimedia	
<input type="checkbox"/> brochure	<input type="checkbox"/> debate	<input type="checkbox"/> computer product	<input type="checkbox"/> scrapbook
<input type="checkbox"/> dramatic script	<input type="checkbox"/> interview	<input type="checkbox"/> dance	<input type="checkbox"/> slide show
<input type="checkbox"/> essay	<input type="checkbox"/> panel discussion	<input type="checkbox"/> diagram	<input type="checkbox"/> tableau
<input type="checkbox"/> news article	<input type="checkbox"/> presentation	<input type="checkbox"/> display	<input type="checkbox"/> television show
<input type="checkbox"/> newsletter	<input type="checkbox"/> role-playing	<input type="checkbox"/> illustration	<input type="checkbox"/> video/DVD
<input type="checkbox"/> report	<input type="checkbox"/> seminar	<input type="checkbox"/> poster	<input type="checkbox"/> website
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> podcast, blog, wiki	<input type="checkbox"/>

Purpose

Describe	Explain	Persuade	Argue
<input type="checkbox"/> state facts	<input type="checkbox"/> comment on format	<input type="checkbox"/> move an audience to change	<input type="checkbox"/> prove a hypothesis
<input type="checkbox"/> retell a story	<input type="checkbox"/> analyze information	<input type="checkbox"/> debate an issue	<input type="checkbox"/> predict possibilities
<input type="checkbox"/> outline ideas	<input type="checkbox"/> investigate concepts	<input type="checkbox"/> defend a position	<input type="checkbox"/> solve a problem
<input type="checkbox"/> summarize findings	<input type="checkbox"/> compare perspectives	<input type="checkbox"/> justify a decision	<input type="checkbox"/> evaluate worth

Details

Audience	Working Arrangements	Evaluation	Role or Point of View	Length
<input type="checkbox"/> peers in class	<input type="checkbox"/> individually	<input type="checkbox"/> rubric	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> students in school	<input type="checkbox"/> pairs	<input type="checkbox"/> checklist		
<input type="checkbox"/> teacher	<input type="checkbox"/> group	<input type="checkbox"/> rating scale		
<input type="checkbox"/> children	<input type="checkbox"/> whole class	<input type="checkbox"/> anecdotal		
<input type="checkbox"/> community (local, global, online)	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>				

Timeline

KEY STEPS	Topic Selection	Focus/Thesis	List of Resources	Completed Notes	Outline	First Draft	Final Product
DATES							

Tip: To keep organized, use a research portfolio that includes the assignment, notes, printouts, and conference details.

Time-Management Strategies



Research takes time. Develop a **Research Plan** to commit to specific days and times in order to complete the stages of research.

Course: _____ **Topic:** _____

Research Plan	
Sample Week 1	<i>Mon.: find a topic / Tues.: class in library / Tues. evening: go to public library</i>
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	

The **Research Log** is a way of keeping track of the specific activities of the research process. Record the resources you use, your thoughts and feelings about the activity, and your evidence of completing the activity (e.g., a teacher's signature, a mark given, a peer review).

Due Date	Research Log	Evidence

Tip: Another option for managing your time during research is to include plans, conferences, and deadlines in your school agenda.

Exploring a Topic: Starting Your Thinking

Get a good start on your research by asking these questions and recording the answers in the boxes below.

I Wonder...

What have I always wondered about this topic?

I Ask...

What questions do I have about this topic?



I Relate...

How does this topic relate to my life, now and in the future?

I Begin...

- explore my textbook
- read a general encyclopedia
- browse magazines
- view a film or video
- surf the Internet
- ask a friend or expert
-

How do I begin finding more ideas?

Strategy 3. Think deeply using different types of questions.

	TYPE OF QUESTION	EXAMPLE	YOUR QUESTION
PREDICTION	Who What When Where Why How + WILL	What will encourage peace in outer space among all nations?	
PROBABILITY	Who What When Where Why How + WOULD	What would it take for humans to colonize Mars?	
POSSIBILITY	Who What When Where Why How + CAN	Why can we not seem to exceed the speed of light when travelling in space?	
IMAGINING	Who What When Where Why How + MIGHT	How might we communicate with extraterrestrial intelligence?	

Strategy 4. Focus your question by completing a focus statement.

(adapted from Booth, 2003)

I am researching _____
 because I want to find out _____
 in order to help my audience understand _____.

Example:

I am researching black holes
 because I want to find out what they are, what causes them, and why they exist
 in order to help my audience understand why their existence is necessary in the universe.

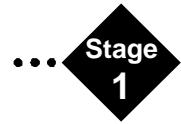
Tip: Spend time upfront developing questions and thereby direct and shape the rest of your research. Don't rush from your getting your topic to quickly creating a "data dump" with all kinds of unrelated information.

Thinking Deeper about Research

Use the following categories of knowledge and skills to think deeply about your research topic, focus, and thesis (adapted Bloom, 1956).

KNOWLEDGE	Identify and recall Information (e.g., Describe the role of a judge in Ontario courts.)	
	Describe, identify, recognize, state, etc.	
COMPREHENSION	Organize, select, and understand facts and ideas (e.g., Summarize the editorial's key points.)	
	Explain, infer, interpret, summarize, etc.	
APPLICATION	Use facts, rules, and principles in a new situation (e.g., Construct a diagram of solar energy.)	
	Construct, discover, prepare, solve, etc.	
ANALYSIS	Take information apart to understand it (e.g., Compare ingredients in household cleansers.)	
	Compare, contrast, distinguish, relate, etc.	
SYNTHESIS	Bring ideas together to create new ideas (e.g., Design a model for learning new math skills.)	
	Combine, design, rearrange, reconstruct, etc.	
EVALUATION	Make judgments and decisions (e.g., Justify the entrance of Canada into World War II.)	
	Criticize, defend, justify, prioritize, etc.	

Assessment: Stage 1 Research



SCORING CHART: Assessment as Learning

1 lowest score → 5 highest score

Stage 1: Research Knowledge and Skills	Score 1–5	Comments
I understand the purpose of my assignment and how it will be evaluated.		
I understand the due date(s), format, and length of my assignment.		
I have explored and chosen a topic I like.		
I have shared my ideas and the reasons for my choice of topic with others.		
I have asked research questions that demonstrate deep thinking.		
I have begun to plan my work in a timeline or agenda.		
I have begun to find materials for my research.		
I have formed a tentative focus for my research.		
I have related prior knowledge to my research.		
I have begun to organize materials for my research.		

RUBRIC: Assessment for Learning

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge/ Understanding Understanding the research assignment	- demonstrates limited understanding of the research assignment	- demonstrates some understanding of the research assignment	- demonstrates considerable understanding of the research assignment	- demonstrates thorough understanding of the research assignment
Thinking Developing research questions and ideas	- develops research questions and ideas with limited effectiveness	- develops research questions and ideas with some effectiveness	- develops research questions and ideas with considerable effectiveness	- develops research questions and ideas with a high degree of effectiveness
Communication Sharing research topic ideas, choices, and plans	- shares research topic ideas, choices, and plans with limited effectiveness	- shares research topic ideas, choices, and plans with some effectiveness	- shares research topic ideas, choices, and plans with considerable effectiveness	- shares research topic ideas, choices, and plans with a high degree of effectiveness
Application Relating prior knowledge	- relates prior knowledge to new research with limited effectiveness and creativity	- relates prior knowledge to new research with some effectiveness and creativity	- relates prior knowledge to new research with considerable effectiveness and creativity	- relates prior knowledge to new research with a high degree of effectiveness and creativity