CONDUCTING THE RESEARCH

You have three weeks to conduct your research.

- In the end you must have **one A4 page of bullet point notes** to take into the SAC. This is to use as a guide to complete the writing of the SAC report.

- Take concise notes in **point form only** – this is part of your authentication for the task. Taking notes by hand may feel a waste of time but it also makes a huge difference in your understanding of a topic.

- Begin by taking notes for **each part on its own paper** and then condense this down to a single page.

- You may jump between sections to **place notes in different parts**.

- You are marked on your use of **credible sources** – you must ensure where you get your information from is reliable and trustworthy. This will also impact your overall mark.

- You may include direct quotes if they are correctly referenced.

It is important that you **understand the information** you are reading and recording.

Don’t be a zombie that cut and pastes without understanding!!!

**NOTE-TAKING**

You may need to **re-read the information a couple of times** before making notes. We recommend the **SQR6 Note-Taking Method** and have adapted this for students.

<table>
<thead>
<tr>
<th>Note Taking</th>
<th>Use the SQR6 Method</th>
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</thead>
<tbody>
<tr>
<td><strong>Survey</strong> the document;</td>
<td><strong>Survey</strong> the document;</td>
</tr>
<tr>
<td><strong>Question</strong> the text (know the purpose of why you are reading this);</td>
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</tr>
<tr>
<td><strong>Read</strong> (just one section);</td>
<td><strong>Read</strong> (just one section);</td>
</tr>
<tr>
<td><strong>Respond</strong> (look away from the material, can you explain it using your own words and examples?);</td>
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</tr>
<tr>
<td><strong>Record</strong> (just the key ideas and words);</td>
<td><strong>Record</strong> (just the key ideas and words);</td>
</tr>
<tr>
<td><strong>Review</strong> (check that you have the correct information).</td>
<td><strong>Review</strong> (check that you have the correct information).</td>
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</table>

What to do if you still don’t understand after re-reading information:

- Ensure you understand all of the terms – use a dictionary (Google... define: __________)
- Skim read on further to see if the next information helps you understand.
- Save this page to come back to later when you have read more.
- Ask for assistance.

**IMPORTANT**- If you are confused or have any questions ... You need to see your teacher or librarian ASAP!
CRITICAL THINKING:
FINDING CREDIBLE INFORMATION

There has never been a more important time in human history for us to know the skills of how to find reliable information.

All of the issues for this task are controversial. There are multiple perspectives, biased views, vested interests, mis-information, and both lives and money are often at stake.

You will be required to locate 6-10 reliable sources of information (books, websites) from which to conduct your research. You will need to complete an evaluation for each of your sources (once for each source) to ensure you are aware of its reliability. We may need to use biased sources — you must just acknowledge and highlight the bias of the source.

Use the ‘Analysis of Sources’ example below to complete the gaps.

Keep the following things in mind when evaluating each of your sources (you will get fast at this):

What type of information is the source?
  - This greatly impacts the reliability of the information.
  - Which types of information are most reliable?
  - Which types of information are least reliable?

A – Authority
  - Who is the author or creator?
  - If it is a person – Are their credentials or ________ available? Are they an expert or professional in the field? You should be trying to find sources that supply good evidence and are written by someone with authority.
  - If the author is an organisation – Who works for the organisation? What are their credentials?
  - Avoid sources such as websites that do not have authors.

P – Purpose
  - Why information is published greatly influences if it can be trusted.
  - Try to detect why the information has been published – Is it to make money (.com for commercial); to education (______); to raise awareness (______); to support citizens (______ for government).

B – Bias
  - Is the source fair, balanced and objective on the topic? (Also neutral)
  - Who are the sponsors of the organisation? Are they reputable?
  - Try and avoid sources that are biased and use emotive and informal language such as "rubbish ideas." Also avoid sources that exaggerate information such as "Thousands of children are murdered every day and no one is aware."

C – Currency
  - How recent is the information? How recently has the website been updated?
  - Is it current enough for your topic?

A - Accuracy
  - Obvious spelling mistakes, professional display of information.
  - Does the creator provide references/bibliography or sources for data or quotations?

“Every two days now we create as much information as we did from the dawn of civilization up until 2003.”
- Google CEO Eric Schmidt, 2010

If you missed this lesson watch a similar version here: [http://bit.ly/2t3rc4m](http://bit.ly/2t3rc4m)
### Research Notes

Here is where you take **hand-written notes**. It should consist of:

- Short summaries of articles you have read
- Bullet points
- Data, Statistics
- Quotes
- Graphs
- Arrows, >, <, =, +
- Short-hand writing - pple, b/w, b/c, w/, etc.

Avoid copying information out in full; just **summarise the key ideas**.

In the in-text referencing section you must write down the author’s last name, year the book or website was published/updated and the page number (these are the details you will be required to place in your report). The full referencing details need to be written on your bibliography - Use the reference page as a guide.

<table>
<thead>
<tr>
<th>In-text reference</th>
<th>EXAMPLE –</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Surname, date/yr</strong></td>
<td>- Bees are just one species of pollinators.</td>
</tr>
<tr>
<td></td>
<td>- 85% of world's flowering plants</td>
</tr>
<tr>
<td></td>
<td>- 72/3 &quot; &quot; crops</td>
</tr>
<tr>
<td></td>
<td>- Impacts on global health + economic security.</td>
</tr>
<tr>
<td></td>
<td>- NNI = &quot;chatty minds&quot;</td>
</tr>
<tr>
<td></td>
<td>- disorientate bees</td>
</tr>
<tr>
<td><strong>Jones, 2014</strong></td>
<td>- Bees store honey as food in times of need.</td>
</tr>
</tbody>
</table>
SOURCE ANALYSIS AND EVALUATION

In this section reflect on your sources. This should be done along the way and completed as you compile your research notes.

It is important for you to understand the reliability of the information you come across. For this task, you will need different points of view and, therefore, some biased information will be useful when trying to understand the different perspectives in the topic.

On this page, you could:

- Make judgements about the reliability of the source
- Draw conclusions about currency, authority and/or purpose of the sources
- Decide whether it matches what you have already found
- Judge bias, hidden agendas or strategic omission on behalf of the author
- Decide how you will use this piece of material
- Use colour, thought bubbles, boxes or symbols to organise your thoughts here.

This should be completed once for every source only. This is also part of the authentication process for the task. An example below has been done for you:

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ANALYSIS OF SOURCES ... for Food Studies Research

Purpose:  #1 Ensure we use only reliable sources  #2 That we understand the ‘bias’ and / or perspective of a source.

Source 1:
Type of Information:  (TICK)
- Reference Encyclopedia or Textbook
- Online Research Paper
- Book
- Journalistic reporting (documentary, news article or magazine article)
- Government website
- Non-government Organisation / Association website
- Business website
- Opinion piece (blog, article, etc.)
- Other

AUTHORITY (LIST this information RIGHT)
Who is the Author? (name)
Qualifications to speak on the topic?
Position (e.g. educator, journalist, hobbyist, reviewer, etc.)

PURPOSE
Why is the information being published? To educate, inform/entertain, make money (TIP: Look at the URLs)

BIAS – Has the information been presented objectively and fairly? Consider the purpose, arguments put forth, attempts to persuade, visible sponsors.

CURRENCY Last Date Updated:

ACCURACY Correct spelling, professional layout and quality display, reference list provided, information cross-referenced?

How reliable overall? (CIRCLE 1-5)
Unreliable 1 2 3 4 5 Reliable

Space for thinking about the source— What questions come to mind concerning the source? Reflections on possible bias, the perspective presented in the source, etc.

Title: Common pesticides can harm bees but the jury is still out on global ban.
This source is relevant for...
Unpacking the research studies...

Phil Lester is a Prof. of Ecology + Entomology at Victoria Univ. Wellington. Scientist + writer

From your analysis, what ‘point of view’ does the source represent? Explain the perspective.

Lester isn't completely objective and states clearly what he shouldn't be a fan despite all studies producing results (impact on bees, but at diet levels).

I think he's not objective enough for a scientist & gives too much of his par...

---
BEGIN YOUR RESEARCH

Part 1: An explanation of concerns related to the food issue in connection to the environment, ethics or social equity.

What is the background information relating to your topic:

- What is the food issue?
- How does the issue connect with environmental sustainability, ethics or food equity?
- Where is the issue occurring in the world?
- When did this issue begin?
- What are the key causes of the issue?
- Generally speaking, what are the different perspectives or points of view on the issue?
- What impact is it having?

**Key Ideas:**

- All connected - diseases + pesticides + limited genetic diversity + declining floral resources
- Causes are contested. Bees are crucial.

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Leister, J (17)

Bees in NZ have more threats - mite + deformed wing virus - fungal diseases widespread - individual beekeepers = look after hives

Pollination = ecosystem service (crucial)
- Has throughout the world
- Managed honey bees are biggest pollinators of crops (commercial)

A combination of factors

Indep. Aust. 2015: Pini

Acc. to International Beekeepers Org. - bee mortality rates undue annually 30-40%
- normal rate 5-10%

Colony Collapse Disorder 1st id. in US 2006.
- Worst hit 3/14-14 42% colonies lost.

UN's Food + Agriculture Org. - 71% crops req. bees
- "If the bee disappeared off the face of the Earth, man would only have 4 yrs left to live" - The Bee by Nobel Prize Winner Maurice Maeterlinck

Quote

All bees are being affected + only the honey bees are affected by mite (chemical compared blame the mites)
### CASE STUDY: Identify one specific example that involves your food issue. The remaining questions will apply to your case study.

#### Part 2: Overview of the case study
- Where is the case study located?
- Who is involved?
- When did this specific issue begin?
- What are the key causes of the issue?
- Why is the issue occurring in this example?

<table>
<thead>
<tr>
<th>Source</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>NZ Parliament</td>
<td>Aust + NZ have different approaches + issues</td>
</tr>
<tr>
<td></td>
<td>NZ - Key causes: There are a number + a # of different threats</td>
</tr>
<tr>
<td></td>
<td>- Genetic, virus, mite, pesticides</td>
</tr>
<tr>
<td></td>
<td>- A serious threat to NZ economy</td>
</tr>
<tr>
<td>Al Jazeera 2015</td>
<td>No wild bees left in NZ. (not true)</td>
</tr>
<tr>
<td></td>
<td>Other possible causes could be electromagnetic radiation.</td>
</tr>
<tr>
<td>Independent Aust Pini, 2015</td>
<td>Aust. is being complacent</td>
</tr>
<tr>
<td></td>
<td>- Besides climate impacts, Aust's honey bees have been relatively ok.</td>
</tr>
<tr>
<td></td>
<td>- No mites here yet</td>
</tr>
<tr>
<td></td>
<td>- Possible future scenarios: colony collapses (unknown)</td>
</tr>
<tr>
<td></td>
<td>- Austral. partly ok due to native flora available.</td>
</tr>
<tr>
<td>Future Direct's 2014</td>
<td>In 2013, 30% of South East Australia's bees died due to drought.</td>
</tr>
</tbody>
</table>

**Key Ideas:**
### DIFFERENT POINTS OF VIEW

- Based on your research of the Case Study, outline the differing points of view or perspectives in the debate that are relevant to your research question and issue.
- What is the specific impact for the stakeholders and/or environment involved in your case study?

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<th>Group</th>
<th>Point of View</th>
<th>Issue impact on the group</th>
<th>Group Role in Solution</th>
</tr>
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<tr>
<td>Bee Keepers - Australian Honey Bee Industry Council</td>
<td>V. Little is any mention of bee concerns on their website or newsletters. Only their perspectives mentioned in parliamentary document. Concern for bees &amp; the cost to replace bees.</td>
<td>Often unwilling to complain b/c they need the good will of farmers. Impacts their profit &amp; livelihood.</td>
<td>Being honest about bee deaths (reporting); ensuring that hives are well maintained; 10 of their honey profit funds research; insist on better hive management (population sizes &amp; locations) - not over stocked; or feed sugar in winter; or placed in poor nutrition areas; intensive long</td>
</tr>
<tr>
<td>Farmers</td>
<td>Central concern is productive crops. Do not want the ban on NNJ but also rather absent in the discussions. NNJ reduces risks to crops. Means more type of crops can be grown in some locations - increased food stability.</td>
<td>Significant if the ban comes in. Also sign. if there are no bees.</td>
<td>Careful use of toxic chemicals; no mixing; spray at correct times. Industry stakeholders.</td>
</tr>
</tbody>
</table>
NZ Greens Party - developed a 10pt. action plan.
- Suspended approvals for use of insecticides linked to bee deaths.
- Gov. to encourage organic farming practices.
- Find research into bee diseases.

Greens website

Producer of NNI
- Insists the chemicals do not very impact colony health.
- Must be "used carefully and in accordance with the label."
- The company produced a kids video blaming miles for bee death and emphasised carry for bees + website.
- Campaign also included sponsorship of events such as the "Global Youth Ag-Summit" in Canberra 2015 + the funding of scientific studies into bee population declines.
- Another chemical producer, Bayer, sued Friends of the Earth for their criticism of "bee friendly" claims + lost in Germany.
- The chemical giants + Monsanto + Syngenta lobby EU to lift ban.
- The UK's National Farmers Union applied to have the NNI ban lifted & was accepted.

Michelle Pini
Group: Government

The Point of View: Began to look into the issue but trying to get stakeholders together. E.g. Report: Pollinators Australia. But this doesn't seem to have happened. Submissions made to gov. but nothing concrete achieved. Gov. wants everyone happy + not willing to upset growers.

Issue impact on the group: Reg's regulation + monitoring - And particularly in Bio-Security to stop the mite.

Group Role in Solution:
Set guidelines + enforce them; to fund research

Group: Ecologists

The Point of View: They are divided but most ask if bees & pesticides can co-exist. They also monitor native bees. Want a result that sees a healthy ecosystem.

Issue impact on the group: No real impact, outside of being a food consumer of pollinated foods.

Group Role in Solution:
Monitoring, conducting research, publishing guides on best practice. E.g. "Thes for Bees" (NZ)

More perspectives on sheet.
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**CURRENCY** Last Date Updated: 2015

**ACCURACY**

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How reliable overall? (CIRCLE 1-5)

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