

Research and Investigation

80 minutes (2 periods)

Coursework Project Preparation

Outcome 1.1

Outcome 1.3

Outcome 1.5

Outcome 1.19

Outcome 1.20

Outcome 1.21

Outcome 1.23

WHAT THIS LESSON DOES

Please note: this module follows the 2026 project brief, whose theme was forests. The State Examinations Commission publishes a new brief each year, with its own theme and its own dates. These lessons will be updated once this year's brief is published. Check the current brief on the SEC website before you begin. In this lesson, you will understand the Investigation section's requirements (400 words, 10 marks), learn SEC referencing and plagiarism rules (including AI use), find and save five reliable sources on your forest theme, write notes on their influence, start a formatted References list, and draft your section using a template.

CURRICULUM OUTCOMES

Outcome	What the specification asks for
1.1	describe a systematic process for solving problems and making decisions
1.3	solve problems by deconstructing them into smaller units using a systematic approach in an iterative fashion
1.5	evaluate alternative solutions to computational problems
1.19	identify features of both staged and iterative design and development processes
1.20	collaborate and assign roles and responsibilities within a team to tackle a computing task
1.21	identify alternative perspectives, considering different disciplines, stakeholders and end users
1.23	reflect and communicate on the design and development process

WHAT STUDENTS SHOULD BE ABLE TO DO

- Understand the requirements and expectations for the Investigation section of the report.
- Grasp SEC rules on referencing, plagiarism, and AI usage to ensure academic integrity.
- Identify and evaluate reliable sources relevant to forest themes and technical solutions.
- Analyse how research findings influence project decisions and design choices.
- Apply proper Harvard-style referencing to compile a formatted references list.

BEFORE THE LESSON

- Have the official brief open and know page 6, the suggested links list students are told to start from.
- Have the current SEC Coursework Rules and Procedures to hand, especially Appendices 1 and 2 on referencing and declaring AI use, so your answers on integrity are exact.
- Check the school filter does not block Coillte, NPWS, Teagasc or the DAFM strategy PDF; test one link before class.
- Agree a shared save location so students can create their research document and evidence folder without account confusion.

Research and Investigation

HOW THE LESSON RUNS

Objectives

What the Brief Says About Investigation

Why Proper Referencing Matters

Types of Sources You Should Look For

How to Reference Correctly (Harvard Style Example)

Practical Research Activity

Writing Your 400-Word Investigation Section (Template)

Checklist Before Next Lesson

TEACHING MOVES

- 2. What the Brief Says About Investigation. Read the brief quote aloud and stress the two parts examiners want: evidence of research on existing solutions, and explanation of the decisions that research led to. Research with no decision attached earns little.
- 3. Why Proper Referencing Matters. Be blunt and calm: undeclared AI is plagiarism, and plagiarism can void the whole 30 percent coursework and trigger an investigation. Then reframe positively, good referencing gains marks rather than just avoiding penalties.
- 4. Types of Sources You Should Look For. Split the board into Irish forest context and existing technical solutions. Point every student at page 6 first, then ask each to name one source they will chase before they open a browser.
- 5. How to Reference Correctly (Harvard Style Example). Work one live example of each row together: website, PDF report, AI use. Show the in-text citation and its matching reference list entry side by side so students see the pair, not one alone.
- 6. Practical Research Activity. Circulate as they build the table. Push on the third column: for each source, make them write one sentence on how it influences their project, not just what it says.
- 7. Writing Your 400-Word Investigation Section (Template). Have students paste the template and fill one paragraph now while a source is fresh. Model turning a finding into a decision: because Coillte says X, I chose Y.
- 8. Checklist Before Next Lesson. Run the checklist as a live audit. Ask each student which item is weakest so they leave knowing their one priority, not with a vague sense of being behind.

WHAT TO WATCH FOR

- Students think listing sources or dropping quotes counts as investigation. Insist every source is tied to a project decision. Reject any table row where the influence column just restates the source.
- Students believe AI use is fine as long as they reword the output, or that it never needs declaring. Point to the SEC rule directly: any AI assistance must be declared in Appendix 2. Reworded AI text that is undeclared is still plagiarism.
- Students save links only and lose access later when a page changes or the filter blocks it. Require a screenshot or PDF of each source in the evidence folder, and an accessed date in every reference, so their evidence survives.

DIFFERENTIATION

- Emerging: Give them two named links off page 6 to start with and the reference template pre-filled for one, so they copy the shape. Let them complete just three strong rows of the table rather than stalling on five weak ones.
- Developing: Ask them to explain aloud how one source changed a design choice before they write the influence column, so the reasoning is in place first.
- Proficient: Push them to compare two competing technical solutions and justify their choice, the kind of evaluation Higher Level marking rewards. Have them draft the full 400 words now and self-check it against the 10-mark criteria.