

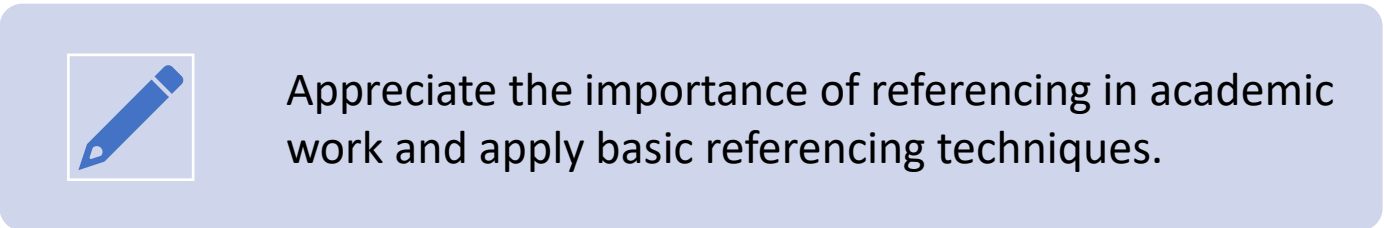
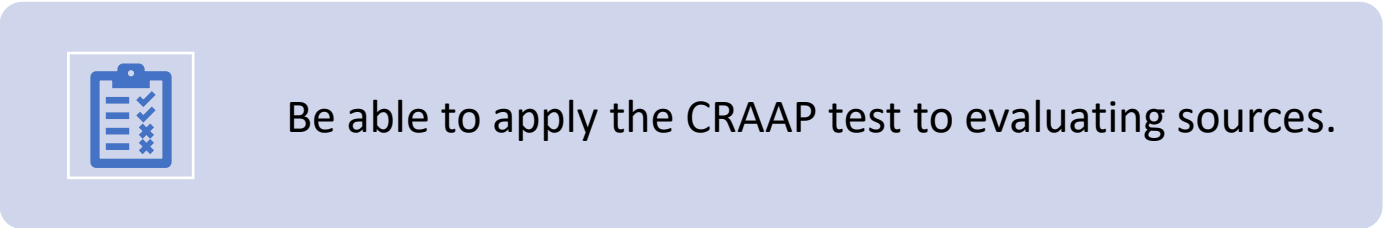
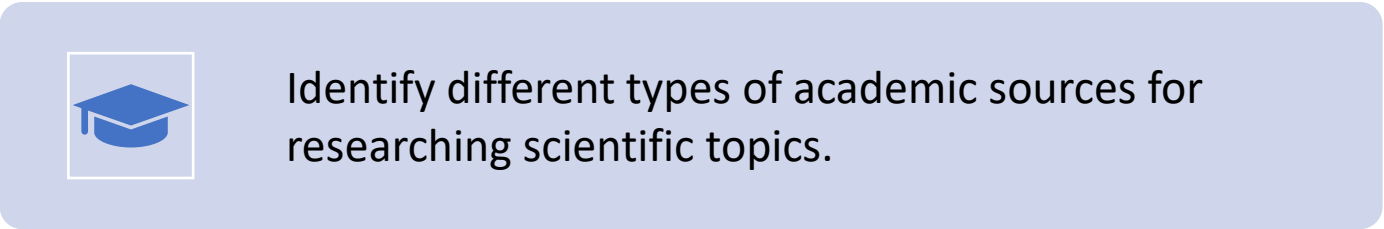
Face your FEaR: Finding, Evaluating and Referencing scientific research

Ollie Bridle & Tom Corrick,

 January 2025

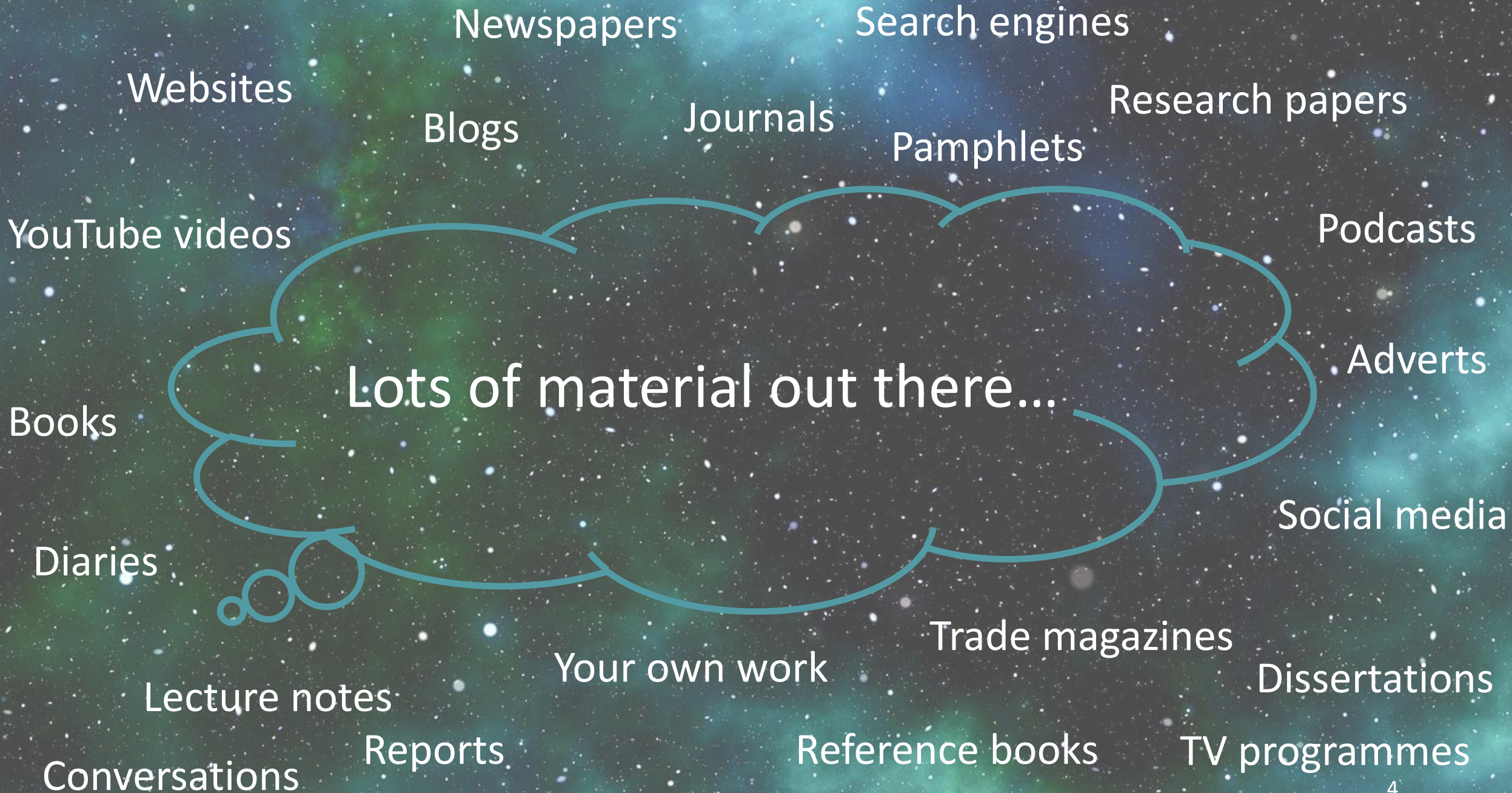



A stack of books with an open book on top, surrounded by floating mathematical symbols and icons like a plus sign, zero, infinity, and a lightbulb.






Academic Sources





Where do
you find
information?



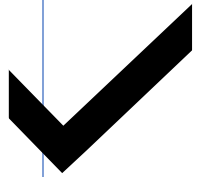
Imagine you have been asked to research an assignment or essay topic for your course.

- **Where would you go to carry out your research?**

Tell us your answers in the Vevox poll.

Types of sources - books

- Textbooks.
- Reference works.

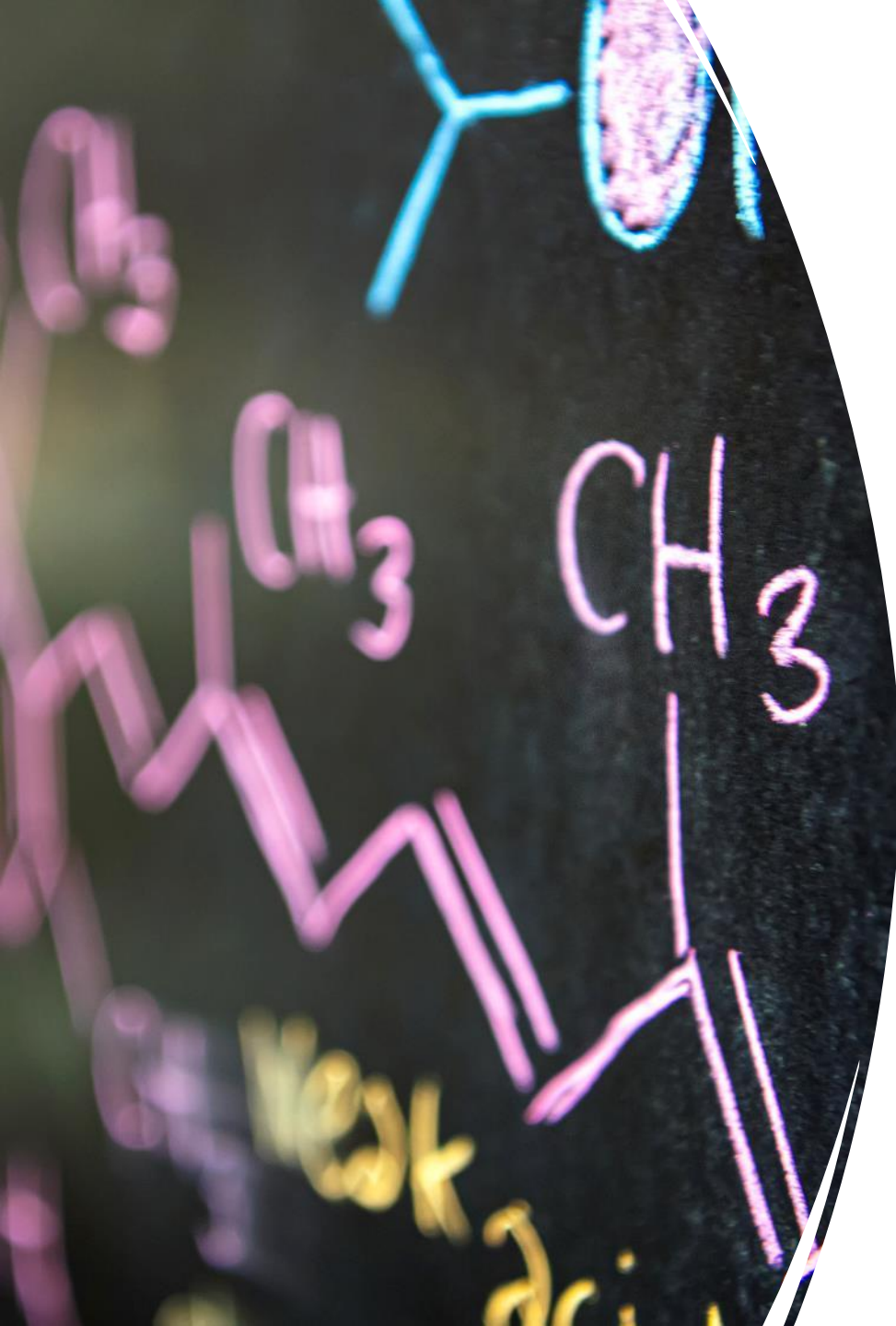


Background reading, definitions, key theories.



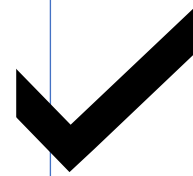
Usually not the latest research.



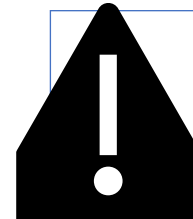


Types of sources – journals/conferences

- Scientific papers.
- Review articles.

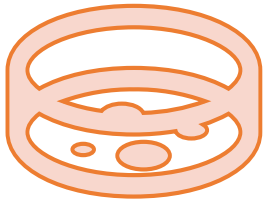


Latest research and in-depth information.



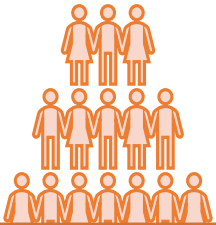
Often highly technical and written for experts.

Types of journal articles



Primary research articles

- Report the results of new studies or experiments. Give the latest scientific research.



Review articles

- Overview of existing knowledge on a subject by summarising existing research. Helpful for background reading. Do not report original findings.

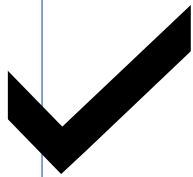


Systematic Reviews

- Special type of review article which attempts to answer a very focused research question by collecting, synthesizing and evaluating the findings of every study available.

Types of sources - websites

- Thousands of useful websites and online resources.

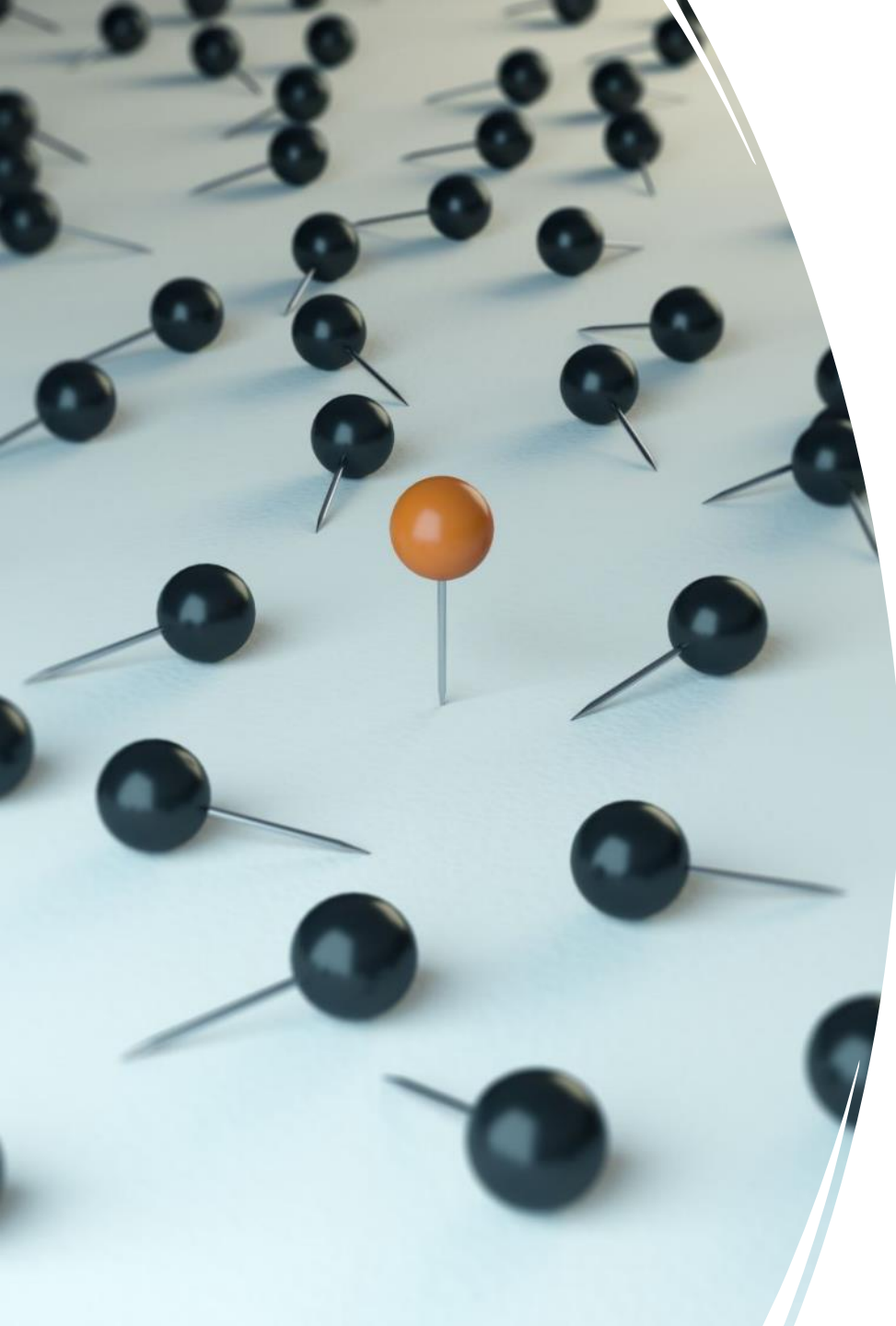


Can provide up-to-date data. Video, software, discussion...



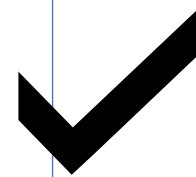
Information quality and suitability for academic work.



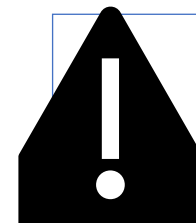


Types of sources – databases

- Index the scientific literature.
- Fantastic for researching assignments and projects.



Quickly find academic literature on any scientific topic.



Need to learn how to get the best results.

Where to look for different things

Message – you probably won't find everything you need in one place!

Books	Journal Articles and Conference Proceedings	Websites	Databases
SOLO	Literature databases	Search Engines	Oxford Database A-Z
Reading lists / ORLO	SOLO Article Search	Subject guides	Subject guides
	Reading lists / ORLO	Reading lists / ORLO	
	BrowZine		

Reading Lists

- Reading lists help highlight key books, papers and websites.
- May be online (ORLO) or printed.
- Sometimes require a bit of interpretation!
- ***Let's look at an example...***



Finding journal articles from a reference

Webster, M., Chen Y-H., Stowell, J., Alhusaini, N., Sweet, T., Graveley, B., Coller, J., and Passmore, L. (2018) 'mRNA Deadenylation Is Coupled to Translation Rates by the Differential Activities of Ccr4-Not Nucleases'. *Molecular Cell* 70(6), 1089-1100

Authors Year Published Title of Article *Title of Journal* Volume, Issue and Page Numbers

Finding journal articles from a reference

Webster, M., Chen Y-H., Stowell, J., Alhusaini, N., Sweet, T., Graveley, B., Coller, J., and Passmore, L. (2018) 'mRNA Deadenylation Is Coupled to Translation Rates by the Differential Activities of Ccr4-Not Nucleases'. *Molecular Cell* 70(6), 1089-1100

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Authors **Year Published** **Title of Article** *Title of Journal* **Volume, Issue and Page Numbers**

You can search for the title on SOLO

You can search for the title of the journal in SOLO or BrowZine.

The reference information on the article

The diagram illustrates the components of a journal article reference. It features a screenshot of a *Molecular Cell* article page with several callout bubbles pointing to specific elements:

- Title of Journal:** Points to the journal name *Molecular Cell*.
- Year published:** Points to the text "2018" in the volume/issue information.
- Volume and issue numbers:** Points to the text "Volume 70, Issue 6" in the volume/issue information.
- Page numbers:** Points to the text "Pages 1089-1100.e8" in the volume/issue information.
- Title of article:** Points to the article title "mRNA Deadenylation Is Coupled to Translation Rates by the Differential Activities of Ccr4-Not Nucleases".
- Authors:** Points to the list of authors: "Michael W. Webster¹, Ying-Hsin Chen², James A.W. Stowell¹, Najwa Alhusaini², Thomas Sweet², Brenton R. Graveley³, Jeff Coller², Lori A. Passmore^{1,4}".

The screenshot also includes the CellPress logo, a "Show more" link, and a footer with a DOI link and a "Get rights and content" link.

Callout Labels:

- Title of Journal
- Year published
- Volume and issue numbers
- Page numbers
- Title of article
- Authors

Journal Information:

Molecular Cell

Volume 70, Issue 6, 21 June 2018, Pages 1089-1100.e8

Article Title:

mRNA Deadenylation Is Coupled to Translation Rates by the Differential Activities of Ccr4-Not Nucleases

Authors:

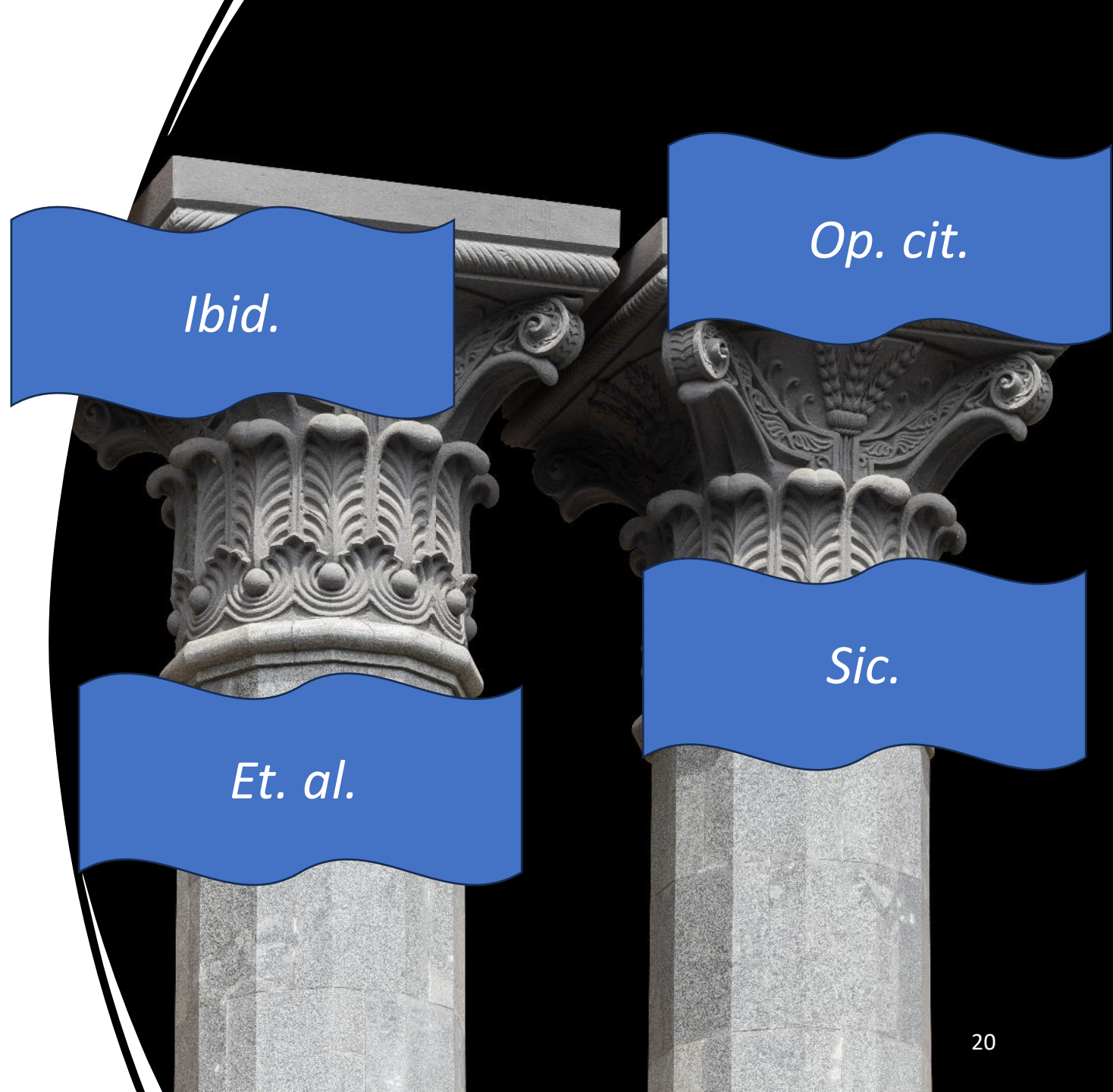
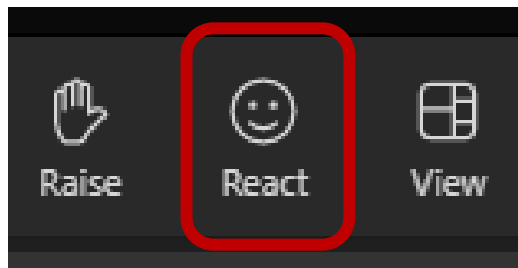
Michael W. Webster¹, Ying-Hsin Chen², James A.W. Stowell¹, Najwa Alhusaini², Thomas Sweet², Brenton R. Graveley³, Jeff Coller², Lori A. Passmore^{1,4}

Footer:

<https://doi.org/10.1016/j.molcel.2018.05.033> [Get rights and content](#)

Chatting Latin

- Reading lists and academic texts may contain unfamiliar Latin abbreviations.
- Take a moment to give us a thumbs up on Teams if you're confident about what the following abbreviations mean.



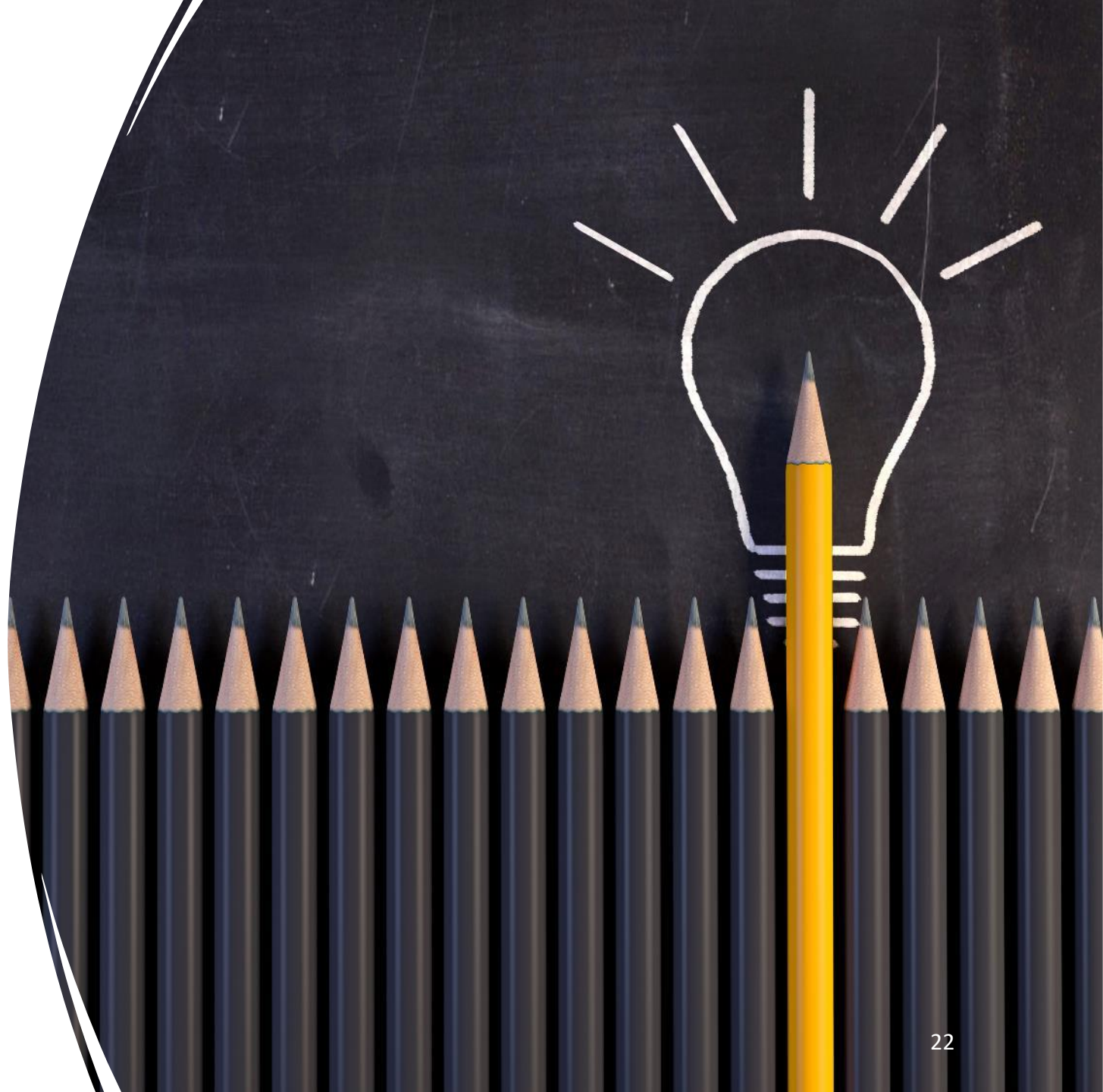
Jargon Buster

- **Ibid.** – *ibidem* – ‘**In the same place**’, used to refer you back to a source that has just been mentioned.
- **Op. cit.** – *opera citato* – ‘**In the work already cited/mentioned**’, like *ibid.* this refers you back to a source that was recently mentioned.
- **Et al.** – *et alii* – ‘**and others / and the rest of them**’, used to abbreviate a long list of authors in a citation for a source written by many people.
- **Sic.** – *sic erat scriptum* – ‘**Thus was it written / It was written this way**’, often used in quotations which contain spelling or grammatical mistakes in the original source. *Sic.* denotes that the error is in the original text. ‘A surprising range of animals thrive in a dessert [*sic.*] ecosystem.’ (Dalglish, 1998, p.37).

Top Tip

You probably won't find everything you need in one place!

Look around, try different resources.



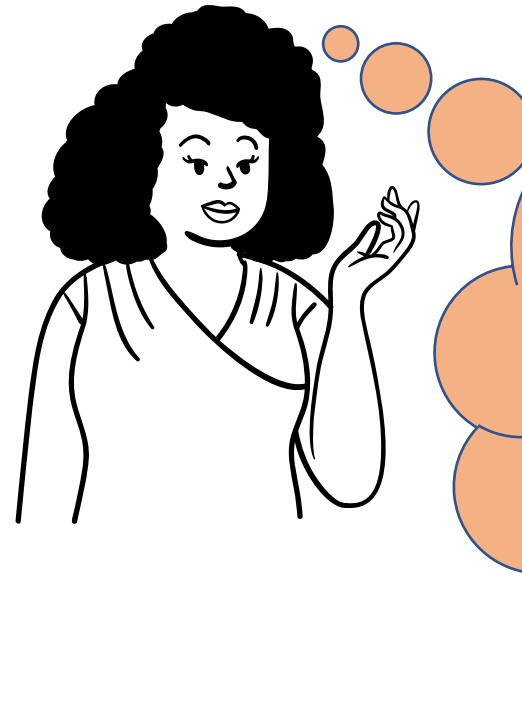


Evaluating Sources

Why bother evaluating sources?



Avoids including inaccurate, false or incomplete information in assignments



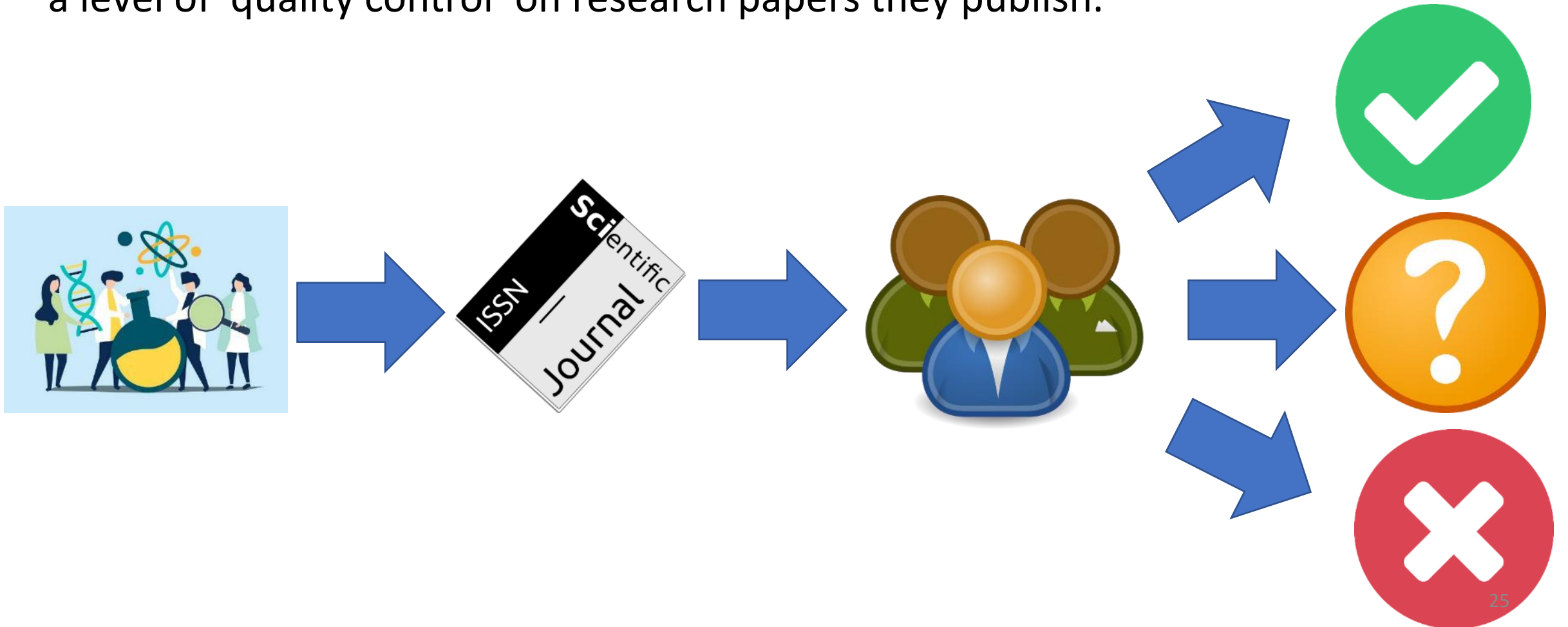
Builds skills to sort reliable information from the rest – useful in any context!

Back up assignments with good quality evidence



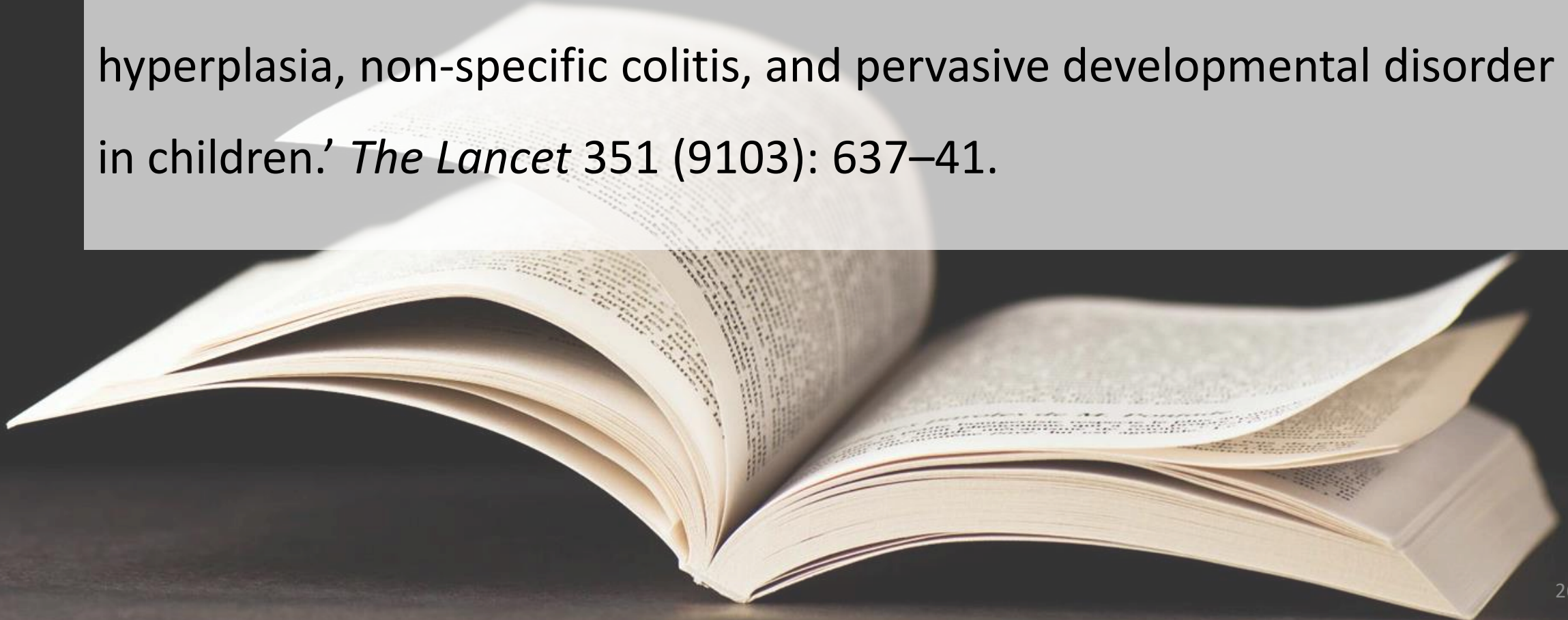
About Peer review

- Academic journals usually use a **peer review** process to provide a level of 'quality control' on research papers they publish.



Do you recognise this paper?

Wakefield A, Murch S, Anthony A, et al. (1998) 'Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children.' *The Lancet* 351 (9103): 637–41.

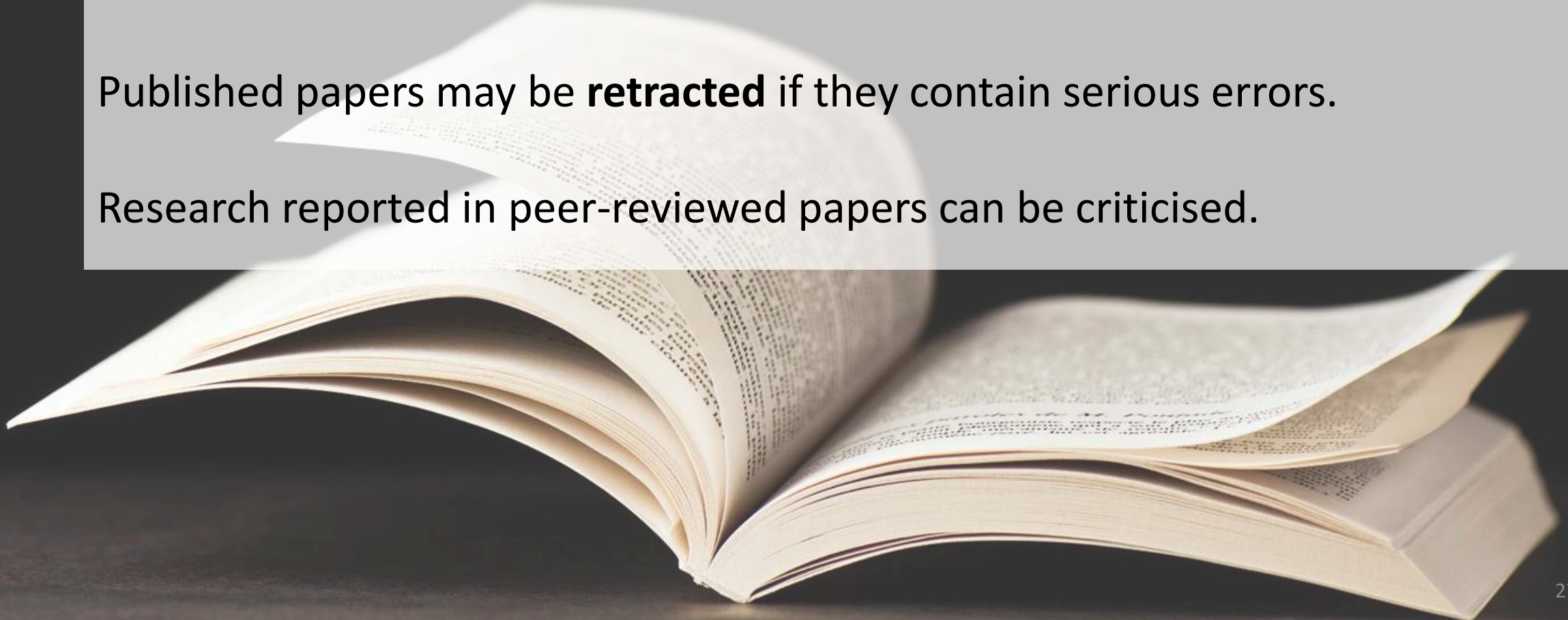


Do you recognise this paper?

This is the redacted article from the Lancet that erroneously linked the MMR autism to vaccines.

Published papers may be **retracted** if they contain serious errors.

Research reported in peer-reviewed papers can be criticised.



Introducing the CRAAP test

Currency

Do you need recent information, or will older information still be useful?
Can you be certain when the source was written?

Relevance

Does the information relate to your topic?
Is it the right depth for your work? Is it aimed at an academic audience?

Authority

Who wrote it? What are their qualifications? Are they an expert on the subject? If you cannot find who (either a person or an organisation) wrote something, assessing its reliability can be difficult.

Accuracy

Has clear evidence been provided? Does it fit with what you know?
Can you back it up with other sources? Is the level of detail sufficient?

Purpose

Why was it written? Is the author likely to be biased?
Is the information fact or opinion? Are there commercial or political motivations?

Applying the CRAAP test

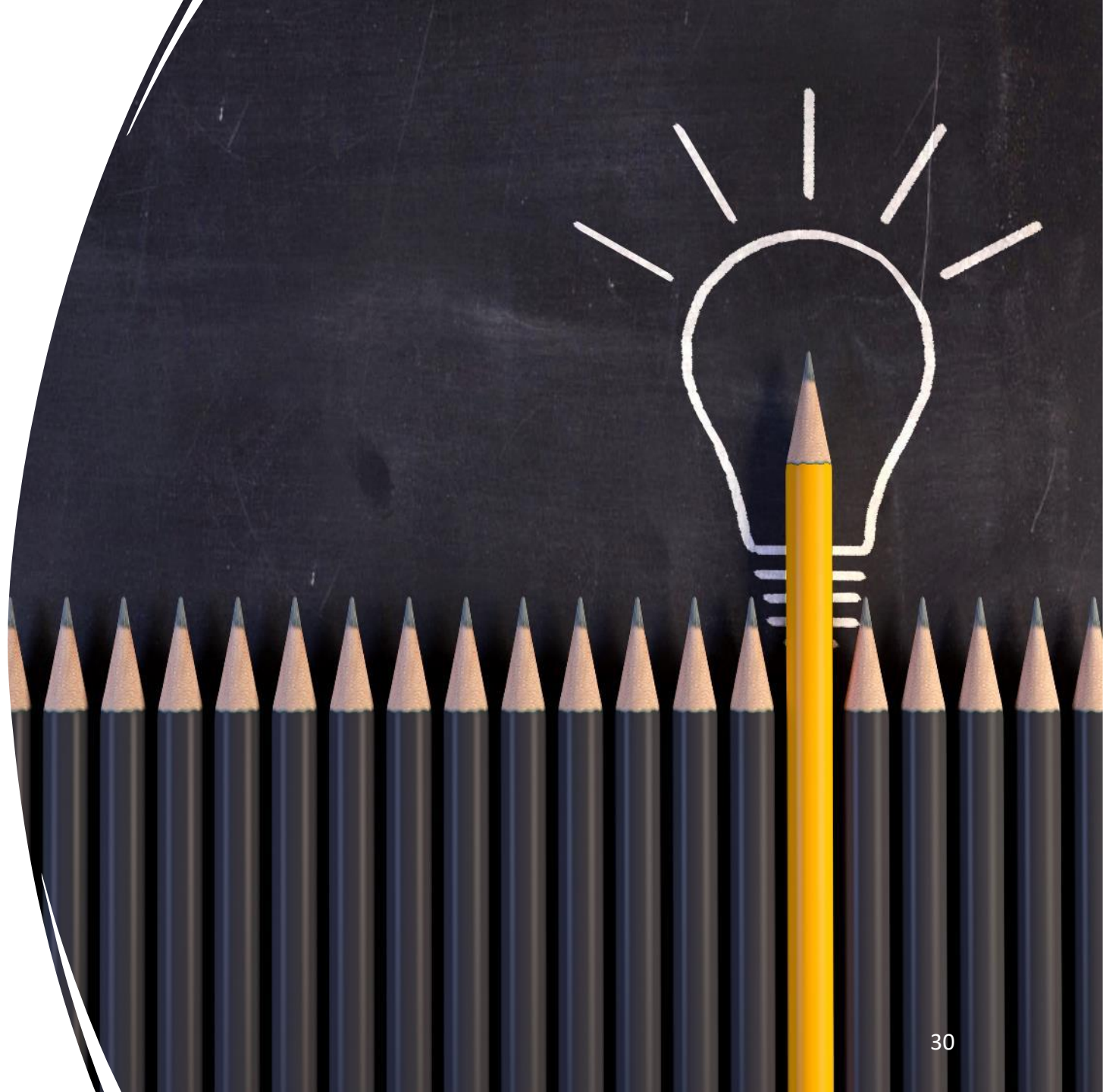
- We would like you to try applying the CRAAP test principles to the following website – www.dhmo.org
- We will collect your ideas on a Padlet.
- <https://tinyurl.com/CRAAPExercise>



Top Tip

Don't believe everything
you read!

Always look at the
primary literature! Go to
the start of the chain.



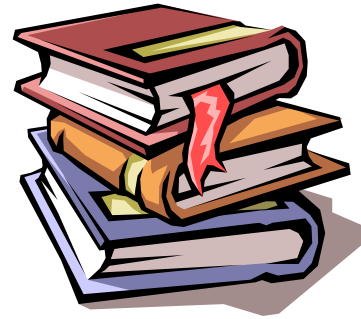


Databases

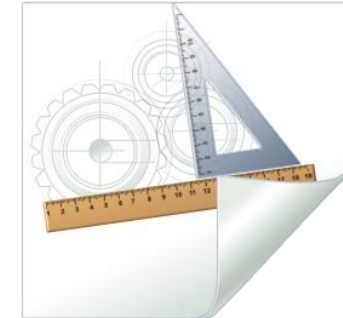
SCOPUS

One of our most popular databases for finding scientific literature.

- 368, 000+ books indexed



- 44 million International patent records



SCOPUS



- Articles from 28, 000 journals and 12.5 million conference papers



- Other material including pre-prints and trade journals.

Finding databases

The screenshot shows the 'Databases A-Z' page from Bodleian Libraries. At the top left is the Bodleian Libraries logo. To its right is the text 'Subject and research guides'. Below the logo, the text 'Bodleian Libraries / Oxford LibGuides' is visible. The main heading is 'Databases A-Z' with the subtext 'Find the best library database'. Two orange callout boxes are present: one on the left pointing to the 'All Subjects' dropdown menu with the text 'Browse by subject', and one on the right pointing to the 'Search for Databases' input field with the text 'Search by name'. Below these are three more dropdown menus: 'All Database Types', 'All Vendors / Providers', and a 'Go' button. A horizontal navigation bar contains letters A through Z and a hash symbol. Below this bar, it says '1652 Databases found' and 'A'. On the right side, there are two green banners: 'LIVE CHAT (click to open)' and 'Use of Oxford e-resources'. Below the second banner, it says 'Oxford subscribes to a wide range of e-resources,'.

Bodleian Libraries / Oxford LibGuides

Subject and research guides

Databases A-Z

Find the best library database

Browse by subject

Search by name

All Subjects All Database Types All Vendors / Providers Search for Databases Go

All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #

1652 Databases found

A

LIVE CHAT (click to open)

Use of Oxford e-resources

Oxford subscribes to a wide range of e-resources,

Use the **Database A-Z** - <https://libguides.bodleian.ox.ac.uk/az.php>

Information about databases

Web of Science

[more...](#)



Web of Science Core Collection

[less...](#)



Alternative names: WOS ; Web of Knowledge ; WoK. Web of Science provides seamless access to the Science Citation Expanded®, Social Sciences Citation Index®, and Arts & Humanities Citation Index™.

To learn more about how to search databases effectively, talk to your
Subject Librarian!

Google Scholar Advantages and Disadvantages

Advantages	Disadvantages
Quick and easy to use	Indiscriminate – picks up non-academic material
Good coverage of major journals and recent publications	Harder to do a detailed search
Understands basic Boolean logic	Unclear how Google creates its search results.
Can link directly to subscribed Oxford e-resources	Metadata often incomplete and older material is sometimes missing.
Basic sorting by date or subject	Few sorting and refining options

Google Scholar at Oxford

Selecting **Settings** from the top of the [Google Scholar Home Page](#)

Select **Library Links**

Searching for **University of Oxford** and selecting it from the list

Saving your settings

You will now see '**Find it @ Oxford**' links next to items in your Google Scholar results that you can use to access the full-text provided by library subscriptions.

Cross-system comparisons of soil nitrogen transformations and nitrous oxide flux
in **tropical forest ecosystems**

PA Matson, PM Vitousek - Global Biogeochemical Cycles, 1987 - Wiley Online Library

Abstract Soil nitrogen transformations and nitrous oxide flux across the soil-air interface

were measured in a range of **tropical forest** sites in Costa Rica, Brazil, and Hawaii. Nitrogen

Find it @ Oxford

Research Guide for Chemistry: Home

A guide to research resources for Chemistry

Subjects: [Chemistry](#), [Materials](#), [Patents](#), [Physics](#)

[Home](#)[Books](#)[Journals and Conference Proceedings](#)[Databases](#)[Web resources](#)[Dissertations](#)[Training](#)

Look up your subject guide. Who's your subject librarian?

- [SOLO](#)

Search SOLO, the University's resource discovery tool, for print and ebooks at Oxford. You can search by author, title or subject and limit to a specific library or online resources.

- [SOLO user guide](#)

If you need help with SOLO, take a look at this guide for tips on searching, managing results and using your SOLO account.

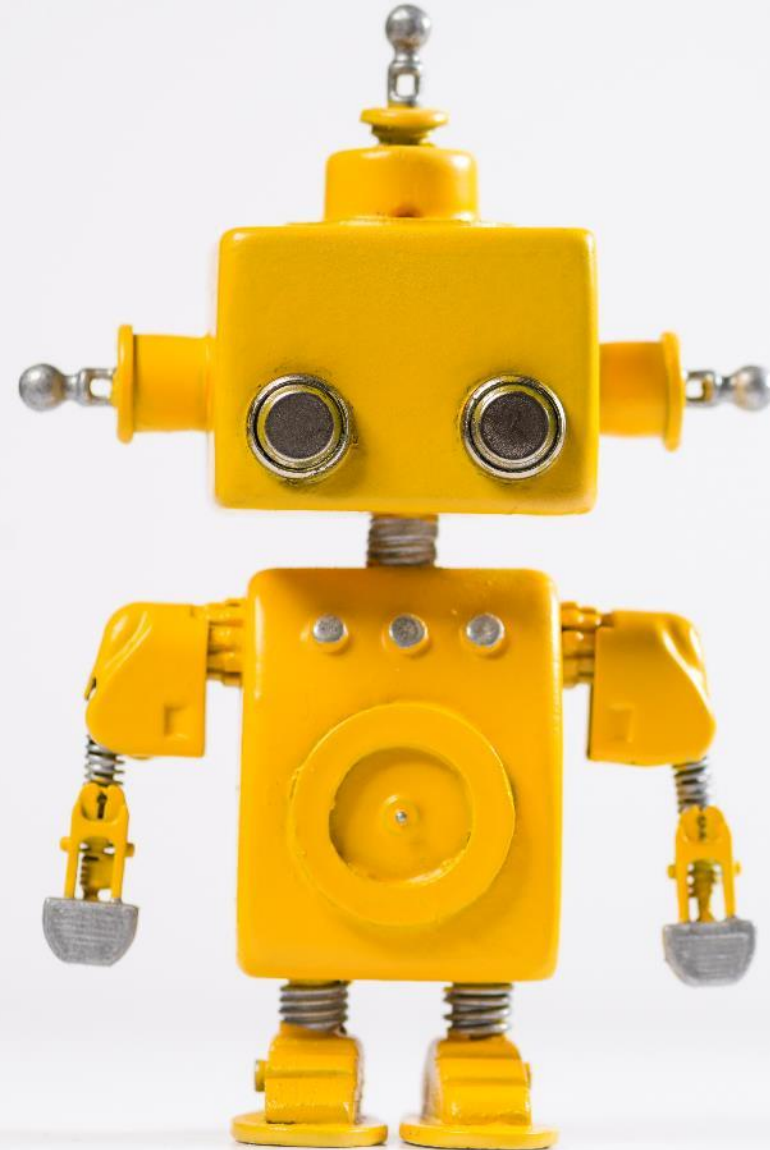


Subject Guides

- **User friendly guides to library resources.**
- You can find the guide for your subject here - <https://libguides.bodleian.ox.ac.uk/subjects>

What about AI?

- ChatGPT, Gemini, Claude AI, Microsoft Co-Pilot and Elicit.
- Poor at giving factually correct answers.
- Often provide references to non-existent sources.
- Can't replace, careful, critical reading and thinking.
- **Fact-check answers from AI tools!**
- More guidance here - <https://www.ox.ac.uk/students/academic/guidance/skills/ai-study>



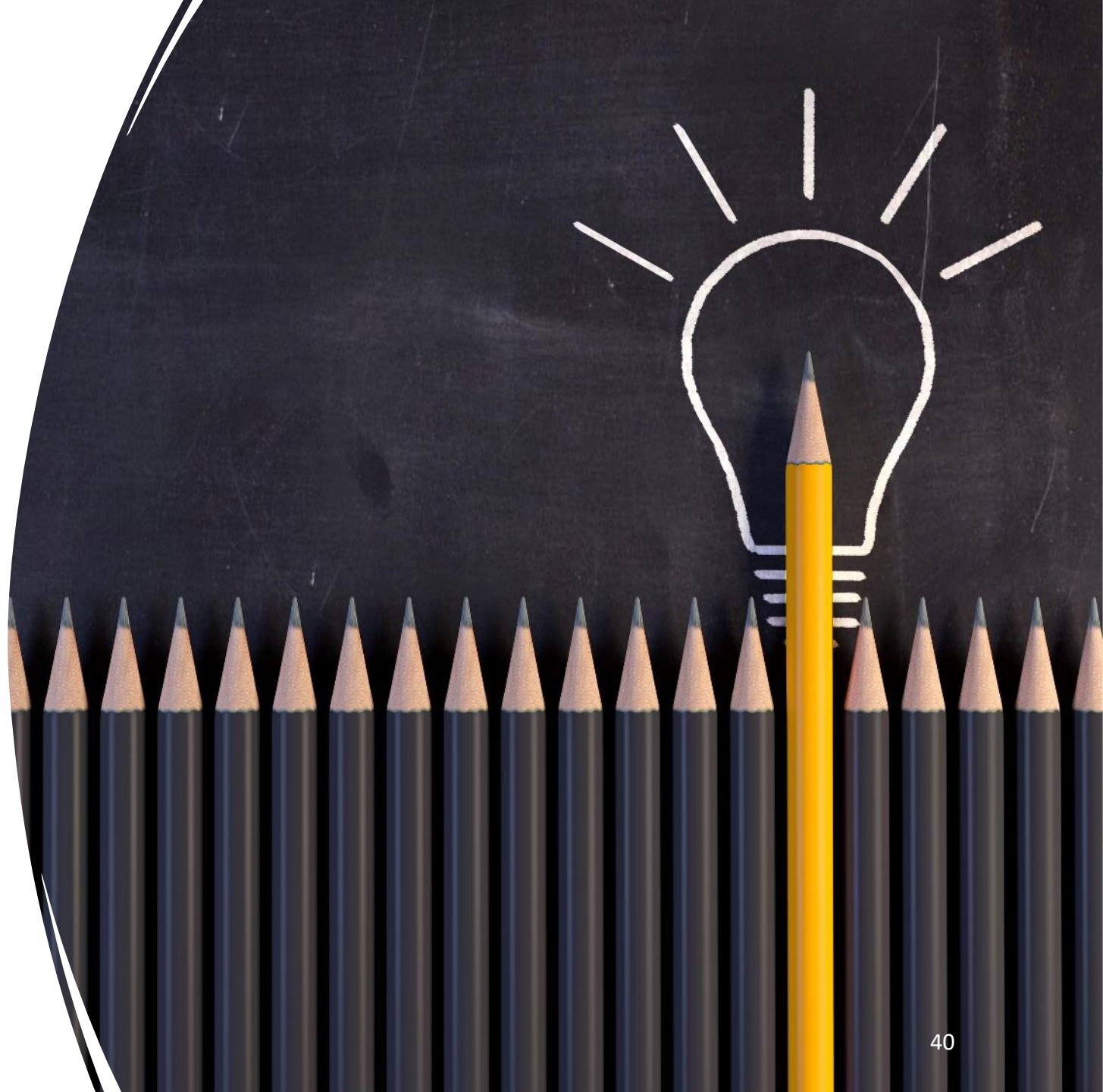
University Policy on AI

- Students **must reference AI in their work** as they would a book, journal article, website etc.
- AI can be used within assessments **only where prior authorisation has been given**, or when AI has been agreed as a **reasonable adjustment** for a student's disability.
- <https://www.ox.ac.uk/students/academic/guidance/skills/plagiarism>



Top Tip

- Try it yourself.
- Investigate
- Ask a Subject Librarian.





Referencing

What does 'referencing' mean?

- Acknowledging/crediting information from other people and sources that you've used in your own work.

			
A quote from a book.	Data from a research article.	Software you have used.	An image or picture.

Why do we need to reference?



Supports your arguments with **evidence** and **examples**



Gives others **credit** and **recognition** for their work



Avoids plagiarism, by clearly showing where you have used the ideas of others



Demonstrates the **quality** of resources you have used and your own **knowledge** of the subject

In-text citations and Reference List

Essay Assignment

The programming language C was first developed in the early 1970s for Bell Labs systems (Kernighan & Ritchie, 1988, p. 1). The language

A full **reference** at the end of the document contains the information required to describe the source

References

Kernighan, B. R., & Ritchie, D. M. (1988). *The C programming language* (2nd ed.). Prentice Hall.

An in-text **citation** to a source is included in the main text

(1988). *The C programming language* (2nd ed.). Prentice

Different Citation Styles

There are many different citation styles but there are two broad types:

- Author-Date
 - Harvard, APA
- Numbered In-Text
 - Chicago, IEEE, Nature

Cite Them Right

- Available as book or website.
- Covers several basic citation styles.
- shows how to cite different item types from conference proceedings to social media.
- <https://www.citethemrightonline.com/Home>

Department Handbook

Your department will have guidance on the style they use.

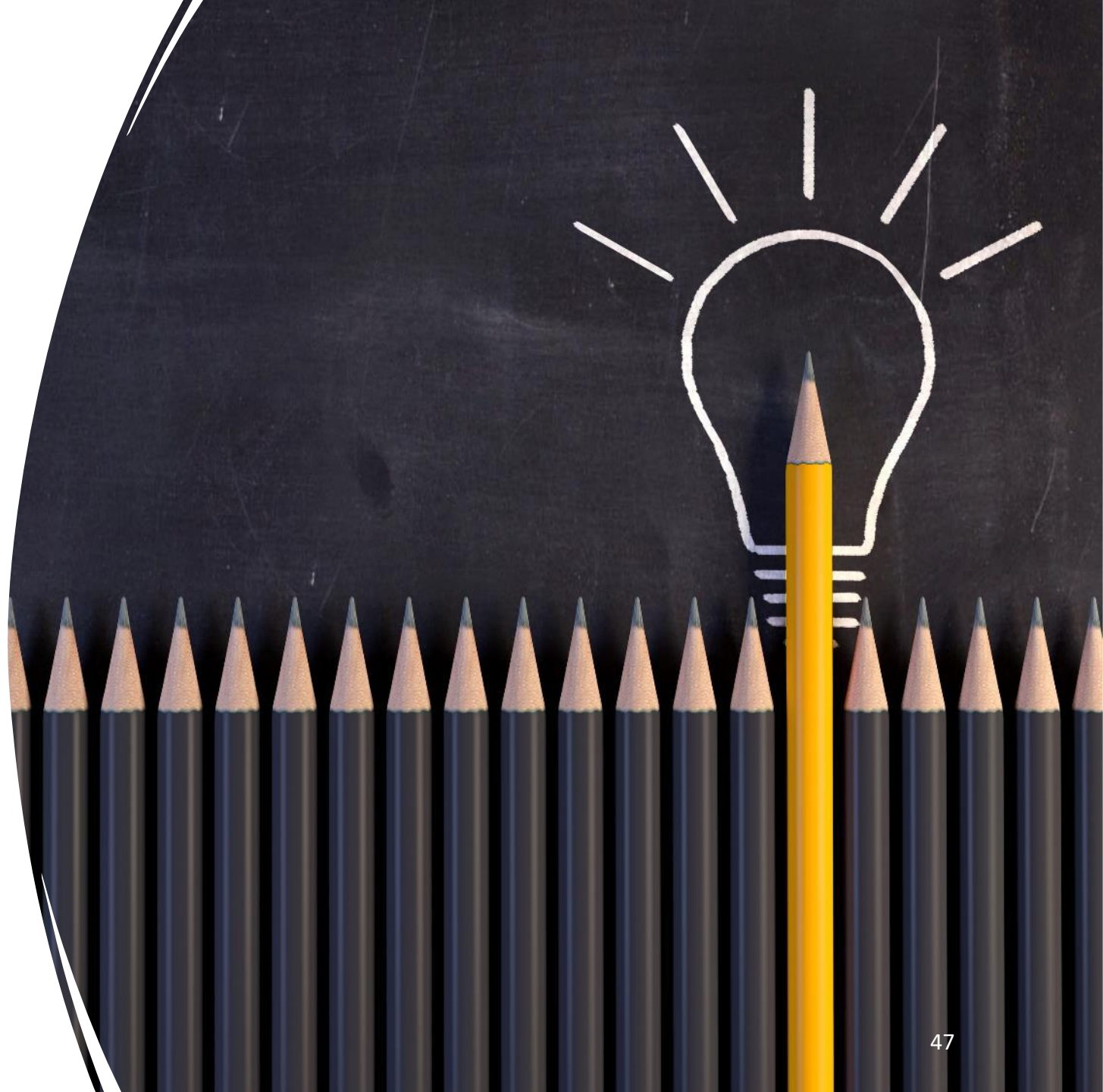
Reference Managers

- **Reference management software** helps you store and organise your references.
- They can **create** in-text citations and reference lists.
- Can **save you time** when writing.
- Different software packages are available.
- **EndNote** and **RefWorks** are **free** for University members.
- Find out more - <https://libguides.bodleian.ox.ac.uk/reference-management>



Top Tip

- Get familiar with your department's preferred referencing style.
- Record authors, titles, publishers, years, page numbers, **EVERYTHING**



Other Research Skills Training

IT Services courses

- Courses in using Stats packages, programming and advanced techniques with Word to help you manage your thesis writing.
- <https://www.it.ox.ac.uk/it-training>

Study Skills Books

- We have a curated collected of books on study and writing skills.
- https://oxford.alma.exlibrisgroup.com/leganto/public/44OXF_INST/lists/42861698990007026?auth=SAML

iSkills

- Run by the libraries.
- Include everything from catalogue searching to reference management and open access publishing.
- <https://www.bodleian.ox.ac.uk/ask/workshops#/>

One-to-One Consultations

- Any help you need using library services or resources, just ask a Subject Librarian.
- <https://www.bodleian.ox.ac.uk/ask/subject-librarians>

The background of the slide is a dense, overlapping collage of numerous small, rectangular sticky notes. These notes are in various colors including pink, light blue, yellow, green, and purple. Each sticky note features a large, bold, black question mark. The notes are scattered across the entire frame, creating a textured, busy appearance. A semi-transparent dark grey horizontal band is positioned across the middle of the image, serving as a backdrop for the main text.

Questions?