

# Writing Workshop

University of Liverpool

# Introduction



# Introduction



Valuable writing tips for academia, for industry and for life

Tricks to adapt your message to different audiences to convince or inspire.

Improve project proposals, funding applications, reports, thesis, online articles, job applications and even explaining to your friends and family what you do

# Introduction



Key writing concepts

Thinking like a **journalist**

**Adapting your language to different audiences**

# Introduction



**1.30 p.m. to 3 p.m.** introduction, theory, practical exercises

**Coffee break (15 mins)**

**3.15 p.m. to 4.15 p.m.** practical exercises, discussion, conclusions

# Introduction



**RIGHT HERE, RIGHT NOW**

# Introduction



**Kate Kahle**, physicist turned science communicator

5 years in publishing, 17 years at CERN

Children's science books, textbooks, European projects, social media, online articles, annual report, community magazines and newsletters

# Introduction



## Get ready to answer ...

What's your name? 

What's your PhD project? 

What inspired you to study physics? 



# Introduction

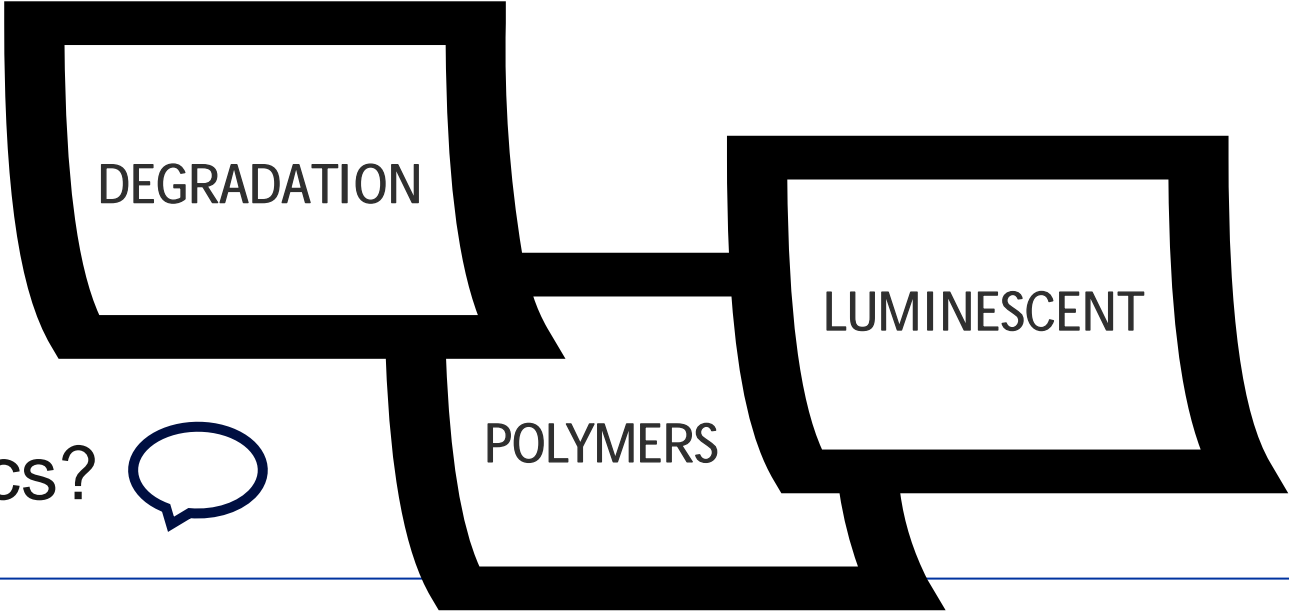


## Get ready to answer ...

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# THEORY

- 1. Thinking like a journalist**
- 2. Active and passive voices**
- 3. Plain English**
- 4. Jargon**
- 5. News articles vs scientific papers**
- 6. Know your audience**

# 1. Thinking like a journalist: 5W and a H



**Nobel Prize for 'attosecond physicists' Agostini, L'Huillier and Krausz**

3 October

<https://www.bbc.com/news/science-environment-66964430>

# 1. Thinking like a journalist: is it newsworthy?

## IMPACT

Will it change my life?

## PROXIMITY

Is it close to home?

## TIMELINESS

Is it new news?

## PROMINENCE

Were high-profile people involved?

## CONFLICT

Is there controversy or violence?

## HUMAN INTEREST

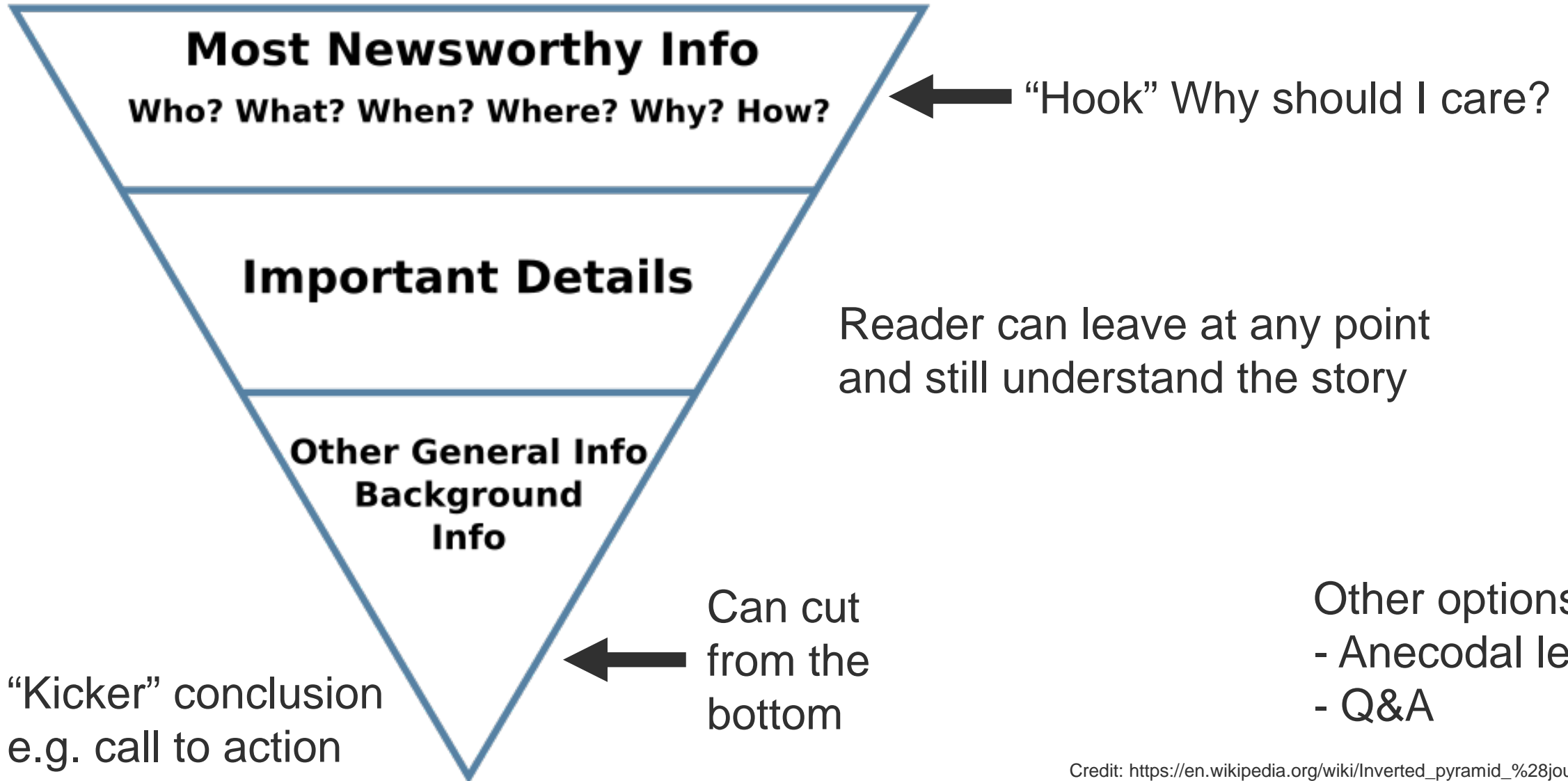
Has a person done something amazing?

## NOVELTY/ODDITY

Is it quirky or weird?

[https://www.bbc.com/news/science\\_and\\_environment](https://www.bbc.com/news/science_and_environment)

# 1. Thinking like a journalist: inverted pyramid



Credit: [https://en.wikipedia.org/wiki/Inverted\\_pyramid\\_%28journalism%29](https://en.wikipedia.org/wiki/Inverted_pyramid_%28journalism%29)

## 2. Active and Passive Voices

Active voice: "I drank the coffee"

- subject + verb + object
- Clear, concise, avoids ambiguity

Passive voice: "the coffee was drunk"

- object + verb
- Who drank the coffee?
- object + verb + (subject) "the coffee was drunk (by me)"

## 2. Active and Passive Voices

Avoid passive, EXCEPT when:

- Performer is unknown or irrelevant “my car was stolen”
- Object is the main topic “The software was used for data analysis”
- To avoid blame or confrontation “mistakes were made”
- Active voice would sound odd “He was injured in a motorcycle accident”, rather than “A motorcycle accident injured him”

## 2. Active and Passive Voices

		Comments
The CineGlobe International Film Festival took place at CERN for its 10th edition.	CERN hosted the 10th edition of the CineGlobe International Film Festival.	more concise
Applications and further information on the programme can be found in the following links.	You can find more information and apply to the programme at the following links.	impersonal passive → direct “you”
For the last 10 years, within the framework of the Be a Scientist project, local schools have been receiving strange mystery boxes provided by CERN.	For the last 10 years, as part of the Be a Scientist project, CERN has been providing local schools with strange mystery boxes.	heavy/convoluted → simpler, active sentence structure



### 3. Plain English: General principles

- Clear and concise
- Grammatically accurate
- Accessible
- Can be read quickly
- Adapted to target audience's knowledge level

Reader focuses on the message rather than how it is written

# 3. Plain English: Sentences and Paragraphs

- **Sentences** are short
- One idea
- Subject, verb, object close together
  
- **Paragraphs** each explore a single topic
- First sentence sums up the topic
- Use transition words and connectors (e.g. “however”, “similarly”, “although”, “additionally”) to link paragraphs

# 3. Plain English: Grammar

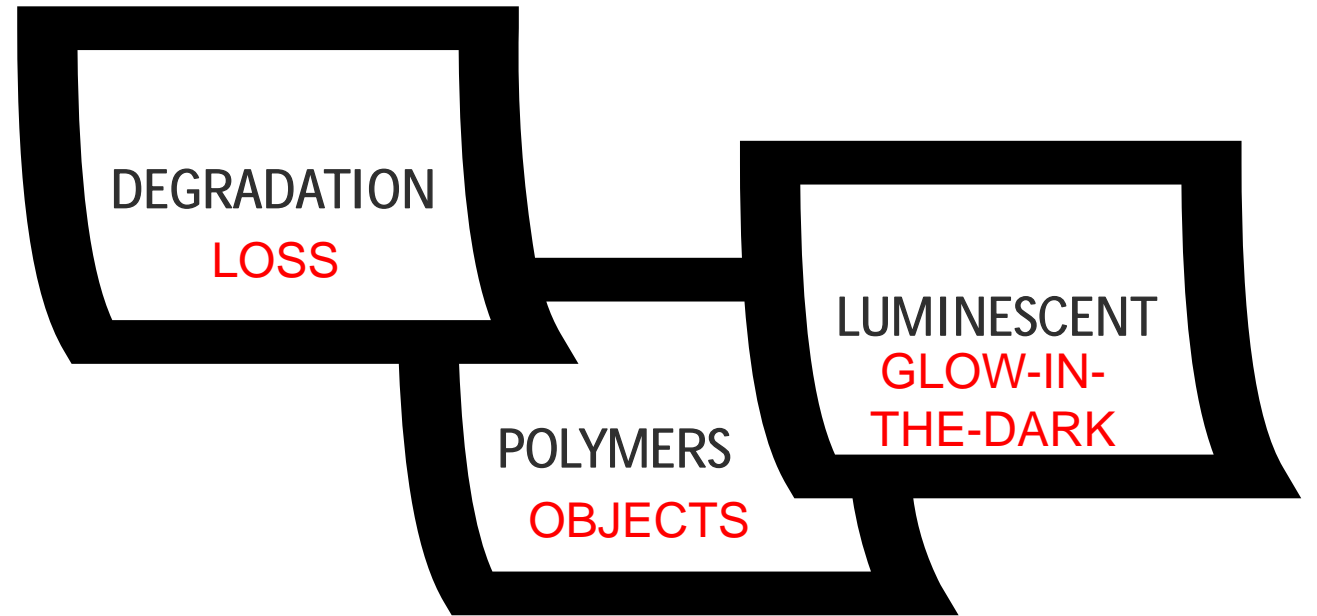
- **Favour active voice** ✓  
During their contract, graduates will be paid a stipend  
During their contract, graduates are paid a stipend
- **Avoid nominalisations** ✗  
~~make an application~~  
apply for
- **Avoid noun strings** ✗  
~~Draft laboratory animal rights protection regulations~~  
Draft regulations to protect the rights of laboratory animals
- **Avoid dangling modifiers** ✗  
Arriving home, the door was open

# 3. Plain English: Words

- Use **simple, familiar** words ✓
- Avoid **compound constructions** ✗  
~~In the event that~~  
If
- Omit **redundant words** ✗  
~~At this point in time~~  
Now
- Beware of **idioms** ✗
- Avoid overusing **abbreviations and acronyms** ✗  
Write the name in full when you first introduce it
- Avoid or explain **jargon** ✗

## 4. Jargon

Specialised terminology associated with a field or area of activity

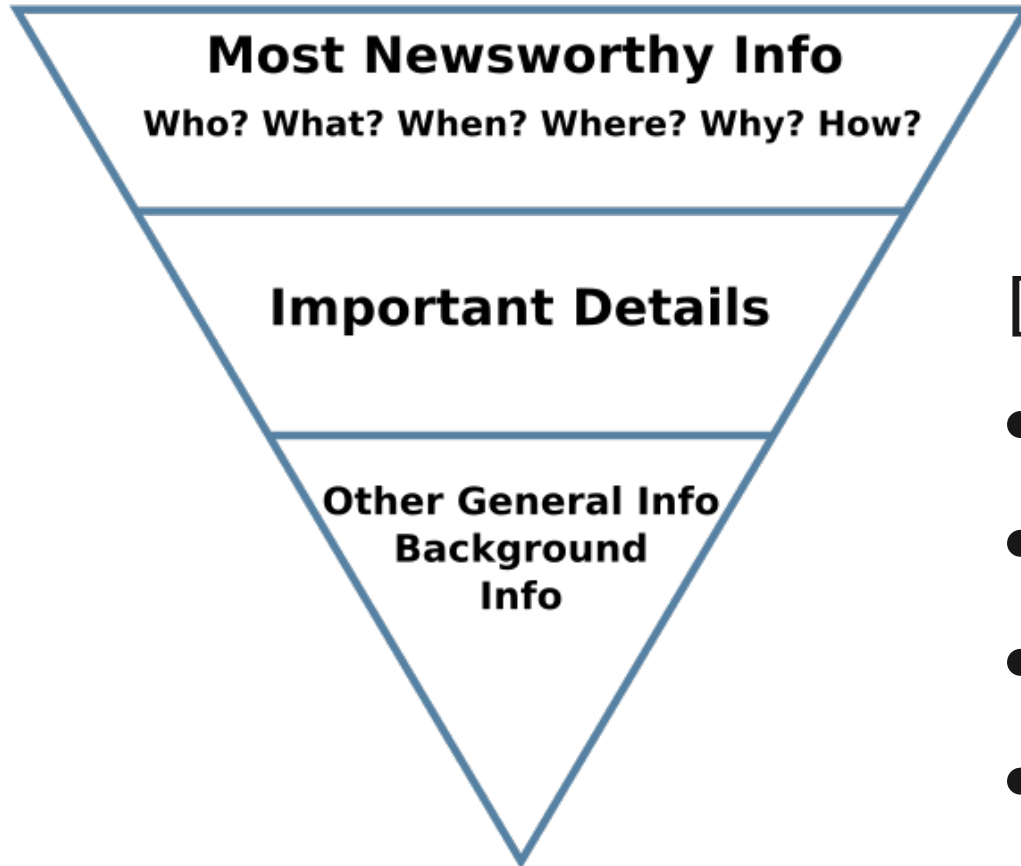


~~Degradation of luminescent polymers~~

How glow-in-the-dark objects lose their glow

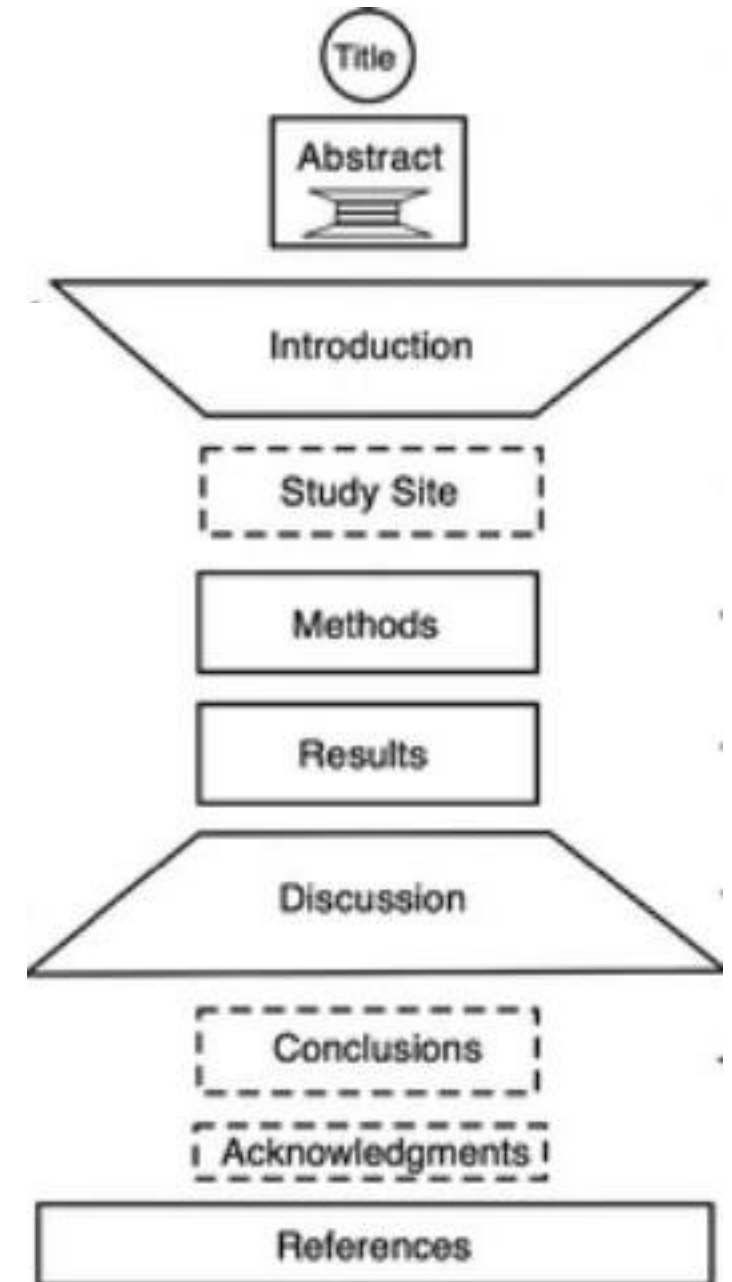
Balance scientific language with plain language to engage broader audiences

# 5. News articles vs research papers



Different

- Structures
- Language
- Purpose
- Audiences



Credit: <https://link.springer.com/article/10.1007/s10980-011-9674-3>

# 6. Know your audience

**AUDIENCES:** 1. Supervisor 2. Scientists 3. Public 4. Politician 5. High-school students

## INFORMATION

**A.** The list of people who contributed to the research.

**B.** The history of helium ions for cancer therapy.

**C.** Acknowledgement of European Union H2020 support for the research.

**D.** Comparison of helium ion beams to proton and carbon ion beams.

**E.** Summary of existing or planned helium ion beam facilities worldwide.

**F.** Technical details of the facility, accelerator and synchrotron.

**G.** The case for why the Baltic States should host a facility.

**H.** Cancer statistics for the region.

**I.** Types of cancers that benefit from particle therapy.

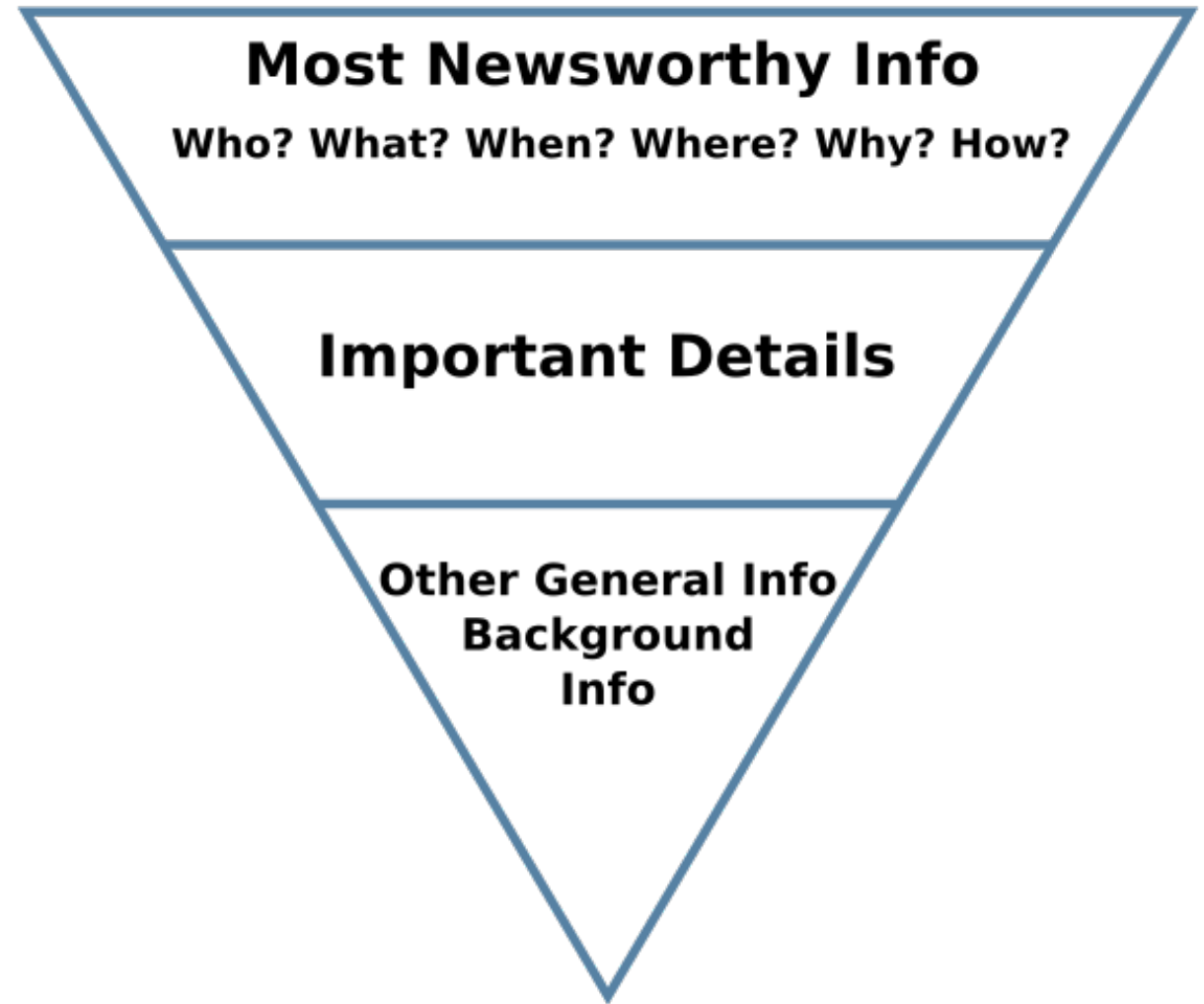
**J.** Estimates of how many patients could benefit from the facility.

**K.** List of references of relevant research.

# Exercise 1

Convert a Scientific Paper into a News Story

- Publication = *The Baltic Times*
- Use inverted pyramid
- Simplify language
- Make it engaging to a general audience (from the Baltic States)
- **Headline**
- **3 paragraphs**
- **Legible writing please!**
- **30 minutes**





Coffee break  
15 minutes

# SOCIAL MEDIA CHANNELS

EXPLAINED IN

*Donut*(s)

“Here is a photo of my donut!  
Hashtag donuts”



“Subscribe to my channel for  
more of me eating donuts!”



“I like donuts. Add me if  
you like donuts too!”



“Hey! Shall we go  
get a donut?”



“I am going to eat  
a #donut”



“Thanks for connecting!  
I am a professional  
donut-eater.”



# Exercise 2

## Convert a News Story into a Social Media Post

- Condense information
- Grab the readers' attention
- Use relevant hashtags to tap into existing conversations
- State which social media channel (X or LinkedIn)
- 2 sentences plus hashtags
- 15 minutes

# Exercise 2: Peer review feedback

Exchange your social media post with the person next to you

- Constructive peer feedback
- What works
- What could be improved
- Focus on clarity, engagement and relevance for target audience

# Exercise 1: Feedback

## Successes

- Examples of engaging headlines
- Use of inverted pyramid
- Language

## Avoid common pitfalls:

- Verbosity
- unclear language
- failing to consider the audience

# Artificial Intelligence: pros and cons

- Can produce a first version for you to adapt ✓
- Can propose a list of catchy headlines as a starting point ✓
- Can suggest ways to improve your text ✓
- Can sound convincing despite giving you wrong information ✗
- Can make up research papers or findings ✗
- Can lack emotion, ethics and originality ✗
- Be cautious with private, sensitive or confidential information ✗

# Useful resource

## The Ultimate Cheatsheet for Critical Thinking

Want to exercise critical thinking skills? Ask these questions whenever you discover or discuss new information. These are broad and versatile questions that have limitless applications!



<b>Who</b>	<ul style="list-style-type: none"> <li>... benefits from this?</li> <li>... is this harmful to?</li> <li>... makes decisions about this?</li> <li>... is most directly affected?</li> </ul>	<ul style="list-style-type: none"> <li>... have you also heard discuss this?</li> <li>... would be the best person to consult?</li> <li>... will be the key people in this?</li> <li>... deserves recognition for this?</li> </ul>
<b>What</b>	<ul style="list-style-type: none"> <li>... are the strengths/weaknesses?</li> <li>... is another perspective?</li> <li>... is another alternative?</li> <li>... would be a counter-argument?</li> </ul>	<ul style="list-style-type: none"> <li>... is the best/worst case scenario?</li> <li>... is most/least important?</li> <li>... can we do to make a positive change?</li> <li>... is getting in the way of our action?</li> </ul>
<b>Where</b>	<ul style="list-style-type: none"> <li>... would we see this in the real world?</li> <li>... are there similar concepts/situations?</li> <li>... is there the most need for this?</li> <li>... in the world would this be a problem?</li> </ul>	<ul style="list-style-type: none"> <li>... can we get more information?</li> <li>... do we go for help with this?</li> <li>... will this idea take us?</li> <li>... are the areas for improvement?</li> </ul>
<b>When</b>	<ul style="list-style-type: none"> <li>... is this acceptable/unacceptable?</li> <li>... would this benefit our society?</li> <li>... would this cause a problem?</li> <li>... is the best time to take action?</li> </ul>	<ul style="list-style-type: none"> <li>... will we know we've succeeded?</li> <li>... has this played a part in our history?</li> <li>... can we expect this to change?</li> <li>... should we ask for help with this?</li> </ul>
<b>Why</b>	<ul style="list-style-type: none"> <li>... is this a problem/challenge?</li> <li>... is it relevant to me/others?</li> <li>... is this the best/worst scenario?</li> <li>... are people influenced by this?</li> </ul>	<ul style="list-style-type: none"> <li>... should people know about this?</li> <li>... has it been this way for so long?</li> <li>... have we allowed this to happen?</li> <li>... is there a need for this today?</li> </ul>
<b>How</b>	<ul style="list-style-type: none"> <li>... is this similar to _____?</li> <li>... does this disrupt things?</li> <li>... do we know the truth about this?</li> <li>... will we approach this safely?</li> </ul>	<ul style="list-style-type: none"> <li>... does this benefit us/others?</li> <li>... does this harm us/others?</li> <li>... do we see this in the future?</li> <li>... can we change this for our good?</li> </ul>

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[globaldigitalcitizen.org](https://globaldigitalcitizen.org)

<https://globaldigitalcitizen.org/6-ways-improve-students-writing-skills/>

# What we covered today...

- 1. Importance of writing skills:** convince, inspire, explain what you do
- 2. Journalism AND critical thinking:**  
Who, What, Where, When, Why, How
- 3. Is it newsworthy:** Impact, Proximity, Timeliness, Prominence, Conflict, Human Interest, Novelty/Oddity
- 4. Use of language:** Active and passive, Plain English, Jargon
- 5. Know your audience:** Why should they care?
- 6. News article** inverted pyramid **vs Research paper** hourglass structure
- 7. Social media:** concise and engaging

**Write a key takeaway**

**Make a pledge to the person next to you**

# Thank you!

Check out career opportunities at CERN

<https://careers.cern/>

<https://careers.smartrecruiters.com/CERN/experienced-graduates>



home.cern