

## 9/18 Quick Write:

What makes a historical source reliable?

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*A historical source is reliable when...*

# 9/18 Quick Write:

A historical source is reliable when... it is from an expert who has studied the topic, does not have a bias, and includes evidence.

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# Objectives:

## Content:

I can identify whether or not a source is reliable by annotating with the Bookmark tool.

## Language:

I can write my identification of whether or not a source is reliable using the sentence stem:

*A reliable source to learn about dodecahedron must include...*

# Mysterious Artifacts...

How do **historians**  
interpret historical  
**artifacts**?

كيف يفسر المؤرخون المصنوعات  
التاريخية؟



# Background & Review

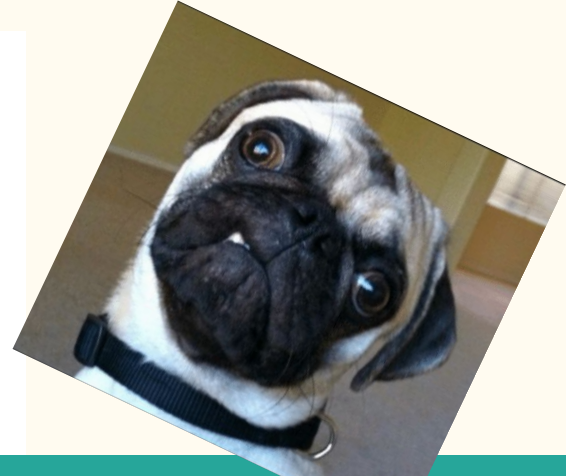
- Sometimes historians agree about how ancient artifacts were used. يتفق المؤرخون على كيف كانت هذه المصنوعات القديمة. تستخدم
- They may have **documents** that tell them or they may **find artifacts** still in **use**. من الممكن انهم عثروا على وثائق تخبرهم عنها او وجدوا المصنوعات مازالت مستخدمة الى الان
- For example, here's an ancient Roman **container used to hold oil**. Some have been **found with oil still in them**.
- مثلا، هذه الجرات الرومانية كانت تحتفظ بالزيت. لان تم العثور على بعضها وبها بقايا زيت



# Background

But sometimes artifacts are found and historians can't agree what they were used for.

في بعض الأحيان لا يتفق المؤرخون على كيفية استخدام المصنوعات التي وجدوها.



# The Roman Dodecahedron

- From the 2<sup>nd</sup> and 3<sup>rd</sup> **century** (القرن)
- **Found** all over **Roman sites** in France, Switzerland, Austria, and Germany
- وجدت في كل مواقع الرومان في فرنسا وسويسرا وأستراليا وألمانيا.
- **Twelve sides**, each **with a circular hole** in the middle (not always the same size), hollow center
- لها ١٢ وجه وكل منهم يحتوى على حفرة مستديرة في الوسط وليس لها نفس الحجم.
- **Not mentioned** in Roman writing
- لم يتم ذكرها في كتابات الرومان



# This week's investigation:



Teachers in Dearborn are planning a lesson about the dodecahedron. We want to include sources that are useful and trustworthy for learning about the dodecahedron. We argue that all three sources we'll be examining this week are reliable for understanding the dodecahedron.

Teachers' CLAIM: **The sources by Guggenberger, Hallett, and Lewis are useful and trustworthy for understanding the dodecahedron.**

By the end of the week, you will write a **critique** to Dearborn teachers, telling us which **source(s) we should NOT use**. You'll need CLAIM, EVIDENCE, and REASONING.



For the next few days,  
we will look at **THREE**  
sources.

## CENTRAL QUESTION السؤال الرئيسي

Which sources are most **reliable** for learning about the dodecahedron?

ماهي المصادر الأكثر ميثاقية (مصدقية) لنعرف عن  
dodecahedron؟

CQ: Which sources are most **reliable** for learning about the dodecahedron?

# Museum article (Source #1)

**Headnote:** *This excerpt is from an article on the dodecahedron published by The Mathematical Intelligencer, a journal which publishes articles on the history and culture of mathematics. The author, Michael Guggenberger, had also written an article on the dodecahedron in 2000 for the Tyrolean State Museum. Tyrol is in the Austrian Alps, where many dodecahedra have been found. Michael Guggenberger studied classical archaeology at the University of Vienna and the University of Innsbruck and works at Austrian Alpine Club museum and historical archive.*

**Attribution:** *Modified from the article by Michael Guggenberger – “The Gallo-Roman Dodecahedron” (2013), published in The Mathematical Intelligencer.*

<https://link.springer.com/article/10.1007%2Fs00283-013-9403-7>

## First: the Headnote and Attribution

As you read:



circle in pencil

- ☐ Who said, drew, or wrote this?
- ☐ When and where was it said, drawn, or written?
- ☐ What type of source is this?
- ☐ Why was it said, drawn, or written? Or, for whom was it created?

After you read:



Discuss with your group.



Make a note

- ☐ Which of these details matter and why?

## Headnote

Gives background about the source & the author

## Attribution

Information about where the source comes from (author, date, etc.)

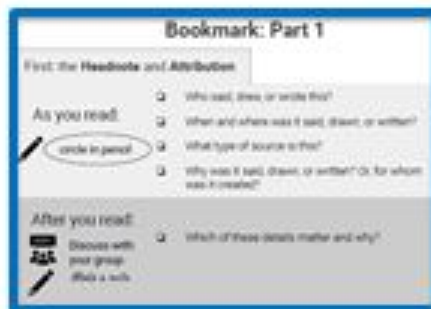
# BOOKMARK - FIRST



## Museum articles (Source 1)

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Michael Guggenberger  
created it, studied  
archaeology

Type of source: article  
in math journal

Created for readers of  
the math journal

Article from 2013

Author works in Tyrol,  
Austria, where  
dodecahedra have  
been found

CQ: Which sources are most **reliable** for learning about the dodecahedron?

## Museum article (Source #1)

Dodecahedra are found in the graves of wealthy people and in hoards with other expensive objects. The length of time they were used shows that they were not a short-term fashion trend, but rather an artifact that was produced and used over many generations. The dodecahedra were used by men and women. Multiple finds show that the users were wealthy civilians and military persons.

CQ: Which sources are most **reliable** for learning about the dodecahedron?



# Bookmark: Part 1


## Second: the Source

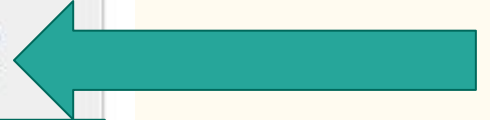
### Second: the Source

- ☐ What people and institutions are actors in the source? What is the relationship between those people and institutions?

As you read:

- ☐ What parts of the source tell you what the author or people in the text think, want, or experience?

 Use one question;



CQ: Which sources are most **reliable** for learning about the dodecahedron?

## Museum article (Source #1)

Underline info about who the people were and why they wanted the dodecahedra

Dodecahedra are found in the graves of wealthy people and in hoards with other expensive objects. The length of time they were used shows that they were not a short-term fashion trend, but rather an artifact that was produced and used over many generations. The dodecahedra were used by men and women. Multiple finds show that the users were wealthy civilians and military persons.



CQ: Which sources are most **reliable** for learning about the dodecahedron?

## Bookmark: Part 2 (backside)

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Dodecahedra are found in the graves of wealthy people and in hoards with other expensive objects. The length of time they were used shows that they were not a short-term fashion trend, but rather an artifact that was produced and used over many generations. The dodecahedra were used by men and women. Multiple finds show that the users were wealthy civilians and military persons.

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### Bookmark: Part 2



Discuss with your group.



Box important parts for answering the Central Question



Write down your group's thoughts.

- ☐ What questions do you have about this source?
- ☐ How reliable is this source for the central question we are trying to answer? See “Reasoning about the Evidence” below.
- ☐ What does this source help us understand about the Central Question?

**BOX** info that relates to the Central Question...  
(How reliable is this source?)



### **AFTER YOU READ...**

(1) How reliable is this source for learning about the dodecahedron?

Reliable –

Unreliable –

(2) What does this article from Guggenberger help you understand about the dodecahedron?

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(3) Box the parts of the source that help you think about the central question.

# Bookmark Part 2: Reasoning about Evidence

3 main questions

**Reasoning about the Evidence**

1. How trustworthy is the author/artist given the central question we are trying to answer?
  - ☐ Was the person who created this in a position to know about the issues?
  - ☐ Was the person who created this an insider or an outsider? (Ex: speaks the same language, knows a lot about topic)
  - ☐ What was the point of view of the person who created this?
  - ☐ What does the person who created this want the reader to think or feel?
  - ☐ Is the source believable?
2. What was going on in the context that the source came from that might affect its usefulness given the central question we are trying to answer?
  - ☐ Was this source created in the place where the events happened?
  - ☐ Was this source created at the time when the events happened? Does that matter?
  - ☐ What else was going on at this time that might have influenced the author/artist?
  - ☐ How does this time/place compare to us today? What's the same or different?
  - ☐ Whose voices or perspectives are not represented here?
3. How do we weigh this source in comparison with others?
  - ☐ Does this source provide the same information as other sources?
  - ☐ In what ways does this source agree or disagree with others?
  - ☐ How do the ideas of the person who created this source compare to other ideas from the same time period or place?
  - ☐ What can this source tell us? What can't we learn from this source?

Follow-up Questions

CQ: Which sources are most **reliable** for learning about the dodecahedron?

## Museum article (Source #1)

Let's say we feel this is a reliable source...

What question could we answer to help show that this is a trustworthy source?

Reasoning about the Evidence

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CQ: Which sources are most **reliable** for learning about the dodecahedron?

## Question for a **Reliable** source

Was the person who created this in a position to know about the issues?

Michael Guggenberger studied archaeology, so he has experience identifying the relationship between artifacts and where they were found.

### Reasoning about the Evidence

- I. How trustworthy is the author/artist given the central question we are trying to answer?
  - ☒ Was the person who created this in a position to know about the issues?
  - ☐ Was the person who created this an insider or an outsider? (Ex. speaks the same language, knows a lot about topic)
  - ☐ What was the point of view of the person who created this?
  - ☐ What does the person who created this want the reader to think or feel?
  - ☐ Is the source believable?

CQ: Which sources are most **reliable** for learning about the dodecahedron?

Find another question  
you could ask to think  
about how this **source**  
might be reliable.

**Reasoning about the Evidence**

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## Question for an **Unreliable** source

Whose voices or perspectives are not represented here?

We don't know how many grave sites of poor Romans have been discovered, so we don't know if they used dodecahedron-- the poor might not be represented in these findings.

2. What was going on in the context that the source came from that might affect its usefulness given the central question we are trying to answer?
  - ☐ Was this source created in the place where the events happened?
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**Reasoning about the Evidence**

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(1) How reliable is this source for learning about the dodecahedron?

Reliable –

Unreliable –

(2) What does this article from Guggenberger help you understand about the dodecahedron?

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(3) Box the parts of the source that help you think about the central question.



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