New Testament Seminar & Read-Through (17 weeks)

November 17, 2019 - Revelations

For Next Week!

1-Sep	Luke	13-24
8-Sep	John	1-11
15-Sep		12-21
22-Sep	Acts	1-13
29-Sep		14-28
6-Oct	Romans	
13-Oct	1 & 2 Corinthians	
20-Oct	Galatians, Ephesians, Philippians, Colossians	
27-Oct	1 & 2 Thessalonians, 1 & 2 Timothy, Titus, Philemon, Hebrews	
10-Nov ~~3-Nov~~	James, 1 & 2 Peter, 1 & 2 & 3 John, Jude	
17-Nov ~~10-Nov~~	Revelations **& Wrap-Up & Party**	
17-Nov	Wrap-up & Party	

History of Writing
Bible Museum - Collierville

The workshop ($12 per person) consists of a:

• presentation concerning the history of writing
• show and tell concerning cuneiform documents
• role of clay in the ancient world
• a hands on class to make your own clay tablet

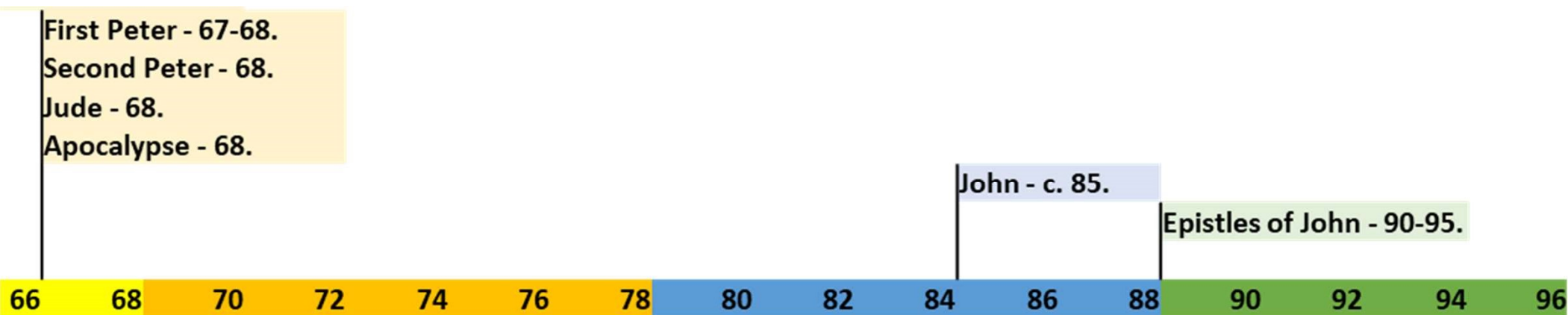# History of Writing
Bible Museum - Collierville

The workshop ($12 per person) consists of a:

• presentation co... ...ory of writing

• show and ... ...eiform documents

• role of clay in ... ...cient world

• a hands on class to make your own clay tablet
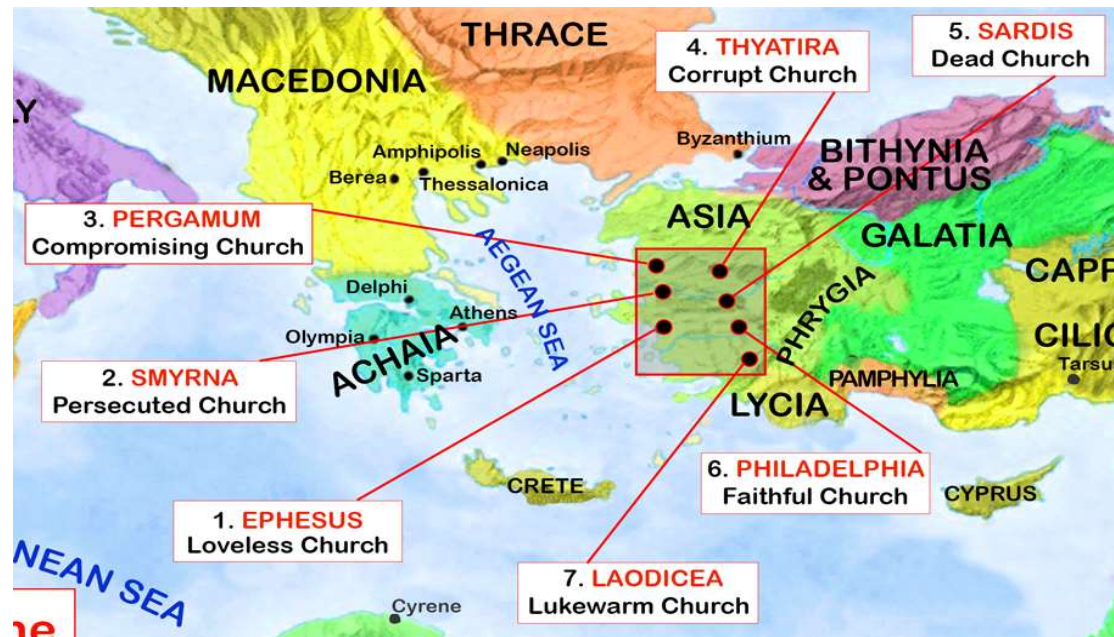
Nov 23rd 10:30 - Noon

Dates of NT Authorship

First Peter - 67-68.
Second Peter - 68.
Jude - 68.
Apocalypse - 68.

John - c. 85.

Epistles of John - 90-95.

| 66 | 68 | 70 | 72 | 74 | 76 | 78 | 80 | 82 | 84 | 86 | 88 | 90 | 92 | 94 | 96 |

Map of the 7 Churches of Asia

Revelation 2 & 3

ConformingToJesus.com

ITALY
Rome

THRACE

MACEDONIA
Amphipolis
Neapolis
Berea
Thessalonica

BLACK SEA

Byzanthium

BITHYNIA & PONTUS

ASIA

GALATIA

CAPPADOCIA

4. THYATIRA
Corrupt Church

5. SARDIS
Dead Church

3. PERGAMUM
Compromising Church

Delphi
Athens
Olympia
ACHAIA
Sparta

AEGEAN SEA

PHRYGIA

CILICIA
Tarsus

COMMAGENE

2. SMYRNA
Persecuted Church

SICILY

MALTA

Patmos

PAMPHYLIA

LYCIA

Antioch

SYRIA

6. PHILADELPHIA
Faithful Church

CYPRUS

1. EPHESUS
Loveless Church

CRETE

MEDITERRANEAN SEA

Cyrene

7. LAODICEA
Lukewarm Church

JUDEA
Jerusalem

CYRENAICA

EGYPT

Alexandria

NABATEA

Memphis

0   100   200   300 Miles
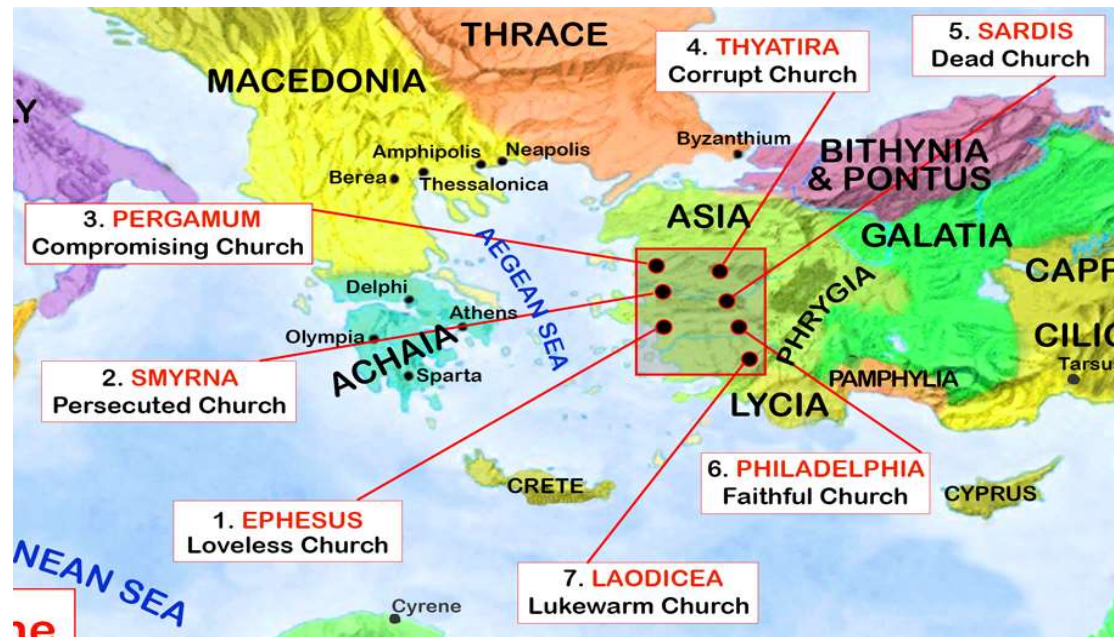0   100   200   300 Kilometers

Pergamum – built on land that juts into water. Worship of Zeus, Dionysus, & Asklepios (god of healing). Library of 200K volumes (2nd only to Library of Alexandria).

Smyrna – Port City – cult of emperor worship. Home of Polycarp

THRACE

MACEDONIA

4. THYATIRA
Corrupt Church

5. SARDIS
Dead Church

Byzanthium

BITHYNIA
& PONTUS

Amphipolis Neapolis
Berea Thessalonica

ASIA

GALATIA

CAPP

3. PERGAMUM
Compromising Church

Delphi

Athens

Olympia

Sparta

AEGEAN SEA

PHRYGIA

CILIC

Tarsus

ACHAIA

PAMPHYLIA

2. SMYRNA
Persecuted Church

LYCIA

6. PHILADELPHIA
Faithful Church

CYPRUS

CRETE

1. EPHESUS
Loveless Church

NEAN SEA

Cyrene

7. LAODICEA
Lukewarm Church

Ephesus – largest City
major trade city
Temple of Artemis (Diana)

Temple of Zeus (Pergamum Museum – Berlin)

Promontory into Aegean Sea

Promontory into Aegean Sea

Thyatira – famous for dyeing (home of Lydia – seller of purple fabrics). Located in a valley – military base for Alexander the Great

Sardis – Wealthy city known for woolen fabric & carpets. First city to mint coinage (600BC). Stream carried gold dust from nearby mountains

Pergamum – built on land that juts into water. Worship of Zeus, Dionysus, & Asklepios (god of healing). Library of 200K volumes (2nd only to Library of Alexandria).

Philadelphia – commercial center located on elevated ground overlooking the fertile plain of the Hermus (Gediz) River

Smyrna – Port City – cult of emperor worship. Home of Polycarp

Laodicea – prosperous, well-respected financial center, textile (black wool) & leading medical school produced eye salve.

Ephesus – largest City
major trade city
Temple of Artemis (Diana)

Sister Cities:
Colossae – mountain spring cold, fresh water
Hierapolis – famous for hot, therapeutic mineral springs

Map labels:
THRACE
MACEDONIA
Amphipolis · Neapolis
Berea · Thessalonica
Byzanthium
BITHYNIA & PONTUS
ASIA
GALATIA
CAPP
3. PERGAMUM Compromising Church
Delphi
AEGEAN SEA
Athens
Olympia
ACHAIA
Sparta
PHRYGIA
CILIC
Tarsus
2. SMYRNA Persecuted Church
4. THYATIRA Corrupt Church
5. SARDIS Dead Church
LYCIA
PAMPHYLIA
1. EPHESUS Loveless Church
CRETE
6. PHILADELPHIA Faithful Church
CYPRUS
NEAN SEA
Cyrene
7. LAODICEA Lukewarm Church

Pamukkale (Hot Springs)

'Reward' for Repentance

Ancient Name	Modern Name	Reward for Repentance
Ephesus	Selçuk	grant the privilege to eat the fruit from the tree of life, which is in the Paradise of God
Smyrna	Izmir	give crown of life (not be hurt by the second death)
Pergamum	Bergama	eat some of the hidden manna - receive a white stone with a new name engraved (that no one knows except the one who receives it)
Thyatira	Akhisar	give authority and power over the nations - give him the Morning Star (deeper understanding / relationship with Jesus)
Sardis	Salihli/Manisa	dressed in white clothing - never blot out name (from book of life) - acknowledge his name before my Father & angels
Philadelphia	Alaşehir	- no repentance needed; be made into a pillar in temple; write on him the name of My God
Laodicea	Pamukkale/Denizli	sit beside me on my throne

Doug's Turkey Tour – Oct (16-19) 19-26, 2020

https://www.douglasjacoby.com/2020-biblical-study-tour-turkey/

Rev 5-8 The 7 Seals

Rev 5-8 The 7 Trumpets

666
(Commentary from the AMP Bible)

This is not actually three sixes (or the equivalent in Greek or Hebrew letters), as commonly represented. Such a combination would not be used; and if it were, the sum would then be only eighteen, because in alphabet-based numbering systems like ancient Hebrew and Greek, place values are not used (10's, 100's etc.), but the letters are treated more like Roman numerals. What John is most likely indicating is that the letters of the name will add up to 666 (the best Greek manuscripts have the number spelled out), and there could be many different combinations of letters that would do so. Determining the values of the individual letters is another matter. John probably assumed that the name would be Hebrew or Greek, and in Hebrew vowels for the most part are not represented as letters. Further complications arise when names from other nationalities are considered, and are converted for valuation. For example, at various times it has been argued that the name "Nero Caesar" adds up to 666 when transliterated to Hebrew as NRWN QSR (according to the Greek form); but in the Talmud, the name is transliterated as NYRWN QYSR, which totals 686. Also, the original Latin form of the name (without the second "n"), if converted directly to Hebrew, adds up to 616, and a few ancient manuscripts had that number.
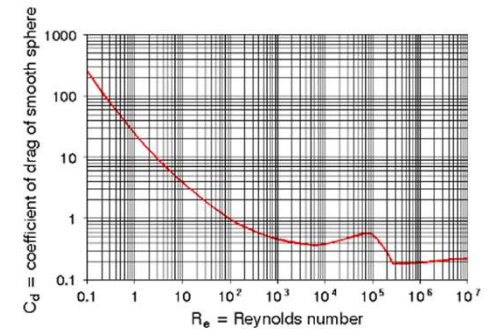
Rev 14 ..ya done did it now!

Rev 16:21 – And giant hailstones, as heavy as a talent fell from the sky on the people...

https://physics.stackexchange.com/questions/216952/terminal-velocity-of-100lb-hail

Air drag is given by

$$F_d = \frac{1}{2}\rho v^2 A C_D$$

where ρ is the density of air (variable, depending on temperature etc - 1.2 kg/m³ is a reasonable approximation), v is the velocity, A is the projected area, and C_D is the drag factor - which is a function of shape and Reynolds number. 0.5 is an OK approximation but it depends on the velocity - see this graph (from http://www.islandone.org/LEOBiblio/SPBI1GU5.GIF).

The terminal velocity is reached when the force is equal to the weight, mg.

We get A from the mass and density. Density of ice is about 920 kg/m³, so a 45 kg sphere of ice has a radius r found by solving

$$\frac{4}{3}\pi r^3 \rho_{ice} = m_{ice}$$

$$r = \sqrt[3]{\frac{3m_{ice}}{4\pi}} = 0.23m$$

This makes the projected area $A = \pi r^2 = 0.16m^2$. So the terminal velocity is found by solving for v, and our initial estimate is:

$$v = \sqrt{\frac{2mg}{\rho A C_D}} = \sqrt{\frac{2*45*9.8}{1.2*0.16*0.5}} = 100 \text{ m/s}$$

If the hailstone is irregular shape, its terminal velocity will change a bit - but not a lot. Depending on the shape, it can be lower or higher.

Now that we have the velocity, we can look at the Reynolds number. A sphere of 0.23 m radius moving at 100 m/s in air has a Reynolds number of about $1.6 \cdot 10^6$, and according to the above graph that results in a much lower C_D of approximately 0.2. Repeating the calculation with that lower drag coefficient we find v = 150 m/s. In principle, we could compute a new R, and repeat... but I don't think the accuracy of the estimate warrants that.

150 m/s is 50% faster than the initial estimate! Note that I rounded my results - precisely because these kinds of errors quickly dominate the result, and giving an answer like "151.6 m/s", (which is what my calculator came up with), gives a false impression that the answer is not 151.7 or 151.5 - when in fact, a lot of estimating went into this and 150 is about as good as you can get.

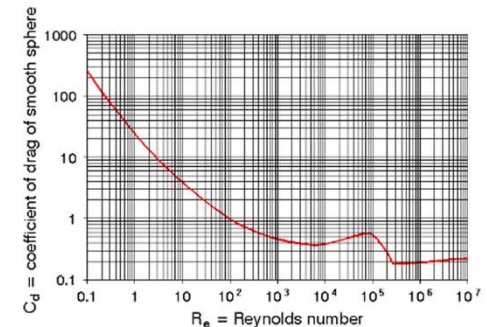# Rev 16:21 – And giant hailstones, as heavy as a talent fell from the sky on the people…

https://physics.stackexchange.com/questions/216952/terminal-velocity-of-100lb-hail

150 m/s or
335 miles per hour

Air drag is given by

$$F_d = \frac{1}{2}\rho v^2 A C_D$$

where ρ is the density of air (variable, depending on temperature etc - 1.2 kg/m³ is a reasonable approximation), v is the velocity, A is the projected area, and C_D is the drag factor - which is a function of shape and Reynolds number. 0.5 is an OK approximation but it depends on the velocity - see this graph (from http://www.islandone.org/LEOBiblio/SPBI1GU5.GIF).

The terminal velocity is reached when the force is equal to the weight, mg.

We get A from the mass and density. Density of ice is about 920 kg/m³, so a 45 kg sphere of ice has a radius r found by solving

$$\frac{4}{3}\pi r^3 \rho_{ice} = m_{ice}$$

$$r = \sqrt[3]{\frac{3 m_{ice}}{4\pi}} = 0.23m$$

This makes the projected area $A = \pi r^2 = 0.16m^2$. So the terminal velocity is found by solving for v, and our initial estimate is:

$$v = \sqrt{\frac{2mg}{\rho A C_D}} = \sqrt{\frac{2*45*9.8}{1.2*0.16*0.5}} = 100 \, m/s$$

If the hailstone is irregular shape, its terminal velocity will change a bit - but not a lot. Depending on the shape, it can be lower or higher.

Now that we have the velocity, we can look at the Reynolds number. A sphere of 0.23 m radius moving at 100 m/s in air has a Reynolds number of about $1.6 \cdot 10^6$, and according to the above graph that results in a much lower C_D of approximately 0.2. Repeating the calculation with that lower drag coefficient we find v = 150 m/s. In principle, we could compute a new R_e and repeat... but I don't think the accuracy of the estimate warrants that.

150 m/s is 50% faster than the initial estimate! Note that I rounded my results - precisely because these kinds of errors quickly dominate the result, and giving an answer like "151.6 m/s", (which is what my calculator came up with), gives a false impression that the answer is not 151.7 or 151.5 - when in fact, a lot of estimating went into this and 150 is about as good as you can get.

Rev 21:1-8

Then I saw a new heaven and a new earth; for the first heaven and the first earth had passed away (vanished), and there is no longer any sea. 2 And I saw the holy city, new Jerusalem, coming down out of heaven from God, arrayed like a bride adorned for her husband; 3 and then I heard a loud voice from the throne, saying, "See! The tabernacle of God is among men, and He will live among them, and they will be His people, and God Himself will be with them [as their God,] 4 and He will wipe away every tear from their eyes; and there will no longer be death; there will no longer be sorrow and anguish, or crying, or pain; for the former order of things has passed away."

Rev 21:1-8

5 And He who sits on the throne said, "Behold, I am making all things new." Also He said, "Write, for these words are faithful and true [they are accurate, incorruptible, and trustworthy]." 6 And He said to me, "It is done. I am the Alpha and the Omega, the Beginning and the End. To the one who thirsts I will give [water] from the fountain of the water of life without cost. 7 He who overcomes [the world by adhering faithfully to Christ Jesus as Lord and Savior] will inherit these things, and I will be his God and he will be My son. 8 But as for the cowards and unbelieving and abominable [who are devoid of character and personal integrity and practice or tolerate immorality], and murderers, and sorcerers [with intoxicating drugs], and idolaters and occultists [who practice and teach false religions], and all the liars [who knowingly deceive and twist truth], their part will be in the lake that blazes with fire and brimstone, which is the second death."

The 'Beatitudes' in Revelations

Blessed is he….

1:3	14:13
16:15	19:9
20:6	22:7,14

Seven visions of the final triumph of heaven over angelic and human rebellion
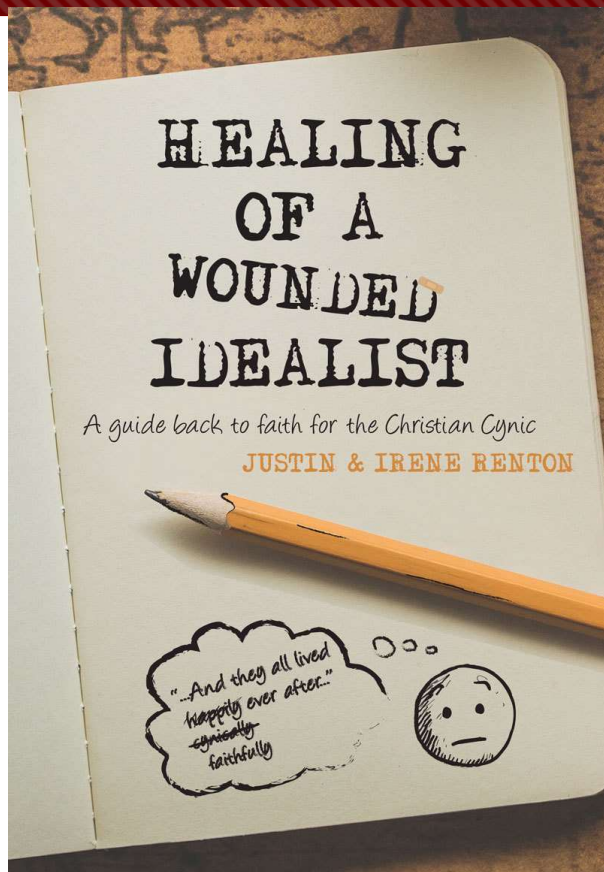
19:6-10
19:17-21
20:4-6
20:11-15

19:11-16
20:1-3
20:7-10

What's Next?

HEALING OF A WOUNDED IDEALIST

A guide back to faith for the Christian Cynic

JUSTIN & IRENE RENTON

- **4 Week Class**
  - ➤ **Nov 24**
  - ➤ **Dec 1, 8, 15**
- **Ordered 10 Books**
- **$10 each**