

# Mathematics

## 1. Mathematics and the Bible

### Main ideas

- Introduction to Mathematics Unit
- Personal history of learning numbers
- Integrating Mathematics and the Bible
- Communication in Mathematics, including Journal writing

### Outcomes

- gain a positive outlook on learning and teaching mathematics
- appreciate the importance of mathematics
- discover the wonders of mathematics as part of God's creation
- discover mathematical principles in the Bible

### Content

#### Introduction (15 minutes)

- In groups students share:

Describe your own Mathematics schooling. What are your memories and how did you feel about Mathematics?

What teaching do you hope to give to your own students?

How might you attempt to ensure you do not reproduce any ineffective teaching you experienced yourself?

#### Integrating Maths and the Bible: (30 minutes)

- We don't question the importance of learning Maths. If we want to be successful in life, we know we need knowledge of mathematical principles to help us to complete our tasks, such as going to the store to buy groceries. We need to know how to use numbers to save money or avoid being cheated. We need to understand measures to plan a trip or cook dinner. Word problems are an important part of mathematics' course. They are real life situations where students can implement their math's principles in practical ways. Students who learn principles without their application to life will never see the importance of Maths and they will have to learn the necessary principles when they are adults trying to "get by".

We integrate Maths and the Bible when we teach students to use Maths as a tool for increasing their understanding of God's truth. The bible is a very mathematical book, from Genesis to Revelation. It begins and ends with the mathematical concept of infinity. It provides understandings that are impossible to reach by means of our human reasoning abilities. Human logic tells us that

everything must have a beginning and an end, yet it also tells us that there must have been something before the “beginning” and something must come after the “end”. Only an infinite God who has said “*My thoughts are not your thoughts...As the heavens are higher than the earth, so...my thoughts than your thoughts*” *Isaiah 55:8-9* provides a satisfactory explanation.

- *Powerpoint: Christian Worldview of Maths*
- Share *Beacon Media* ideas for lower primary students and biblical activities.
- List own ideas from your knowledge of the Bible.
- **Place Value/ Memory strategies for completing addition, subtraction, multiplication and division.** (50 minutes)
- In groups students write down all the mental strategies that help them – categorize them into addition and subtraction; multiplication and division. Start with the simplest ideas working to the more complex. Groups choose how to set out their posters with the strategies. Report back to the whole group. What strategies have been missed that could be added.
- Give out notes on Mental Strategies.
- Use place value charts – MAB’s and paddlepop bundles to make numbers.
- Look at worksheet – drawing, symbol, concrete materials, word
- Hundreds chart – colour in row of 10’s, different colour 5’s, different colour in 2’s.

## **Notes:**

### **Integrating Mathematics and the Bible**

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## **Seven Mathematical Biblical principles**

### **Principle no. 1**

God is a God of order, in that in every mathematical procedure we must follow a fixed order of operations. Physiology and the number 7 rings true for man’s years – “Three-score years and ten  $7 \times 10$ . The various periods of gestation are commonly multiple of 7 – with insects the ova are hatched from 7 half-days (such as the wasp and the bee); while with others it is 7 whole days; mice is 21 ( $3 \times 7$ ), hare and rat, 28 ( $4 \times 7$ ), the cat, 56 ( $8 \times 7$ ), the dog 63 ( $9 \times 7$ ), the lion 98 ( $14 \times 7$ ), the sheep, 147 ( $21 \times 7$ ), incubation of chickens 21 ( $3 \times 7$ ), ducks 28 ( $4 \times 7$ ); and humans 280 ( $40 \times 7$ ).

During the time of the French revolution under Robespierre, a 10 day week was introduced, instead of the God Ordained 7 day week. Humans and animals could not cope with having only 1 rest day in 10. Men started to get ill and cattle collapsed in the fields. Soon, they had to go back to the 7-day week. God’s pattern should not be violated.

Cells in the human body are constantly dying and being replaced. This works on a 7 year cycle, whereby over a period of 7 years every cell in the human body is replaced.

### **Principle no. 2**

God is a God of precision, as evidenced by the exactness of measurements and solutions. The Bible is full of measures of volume, length, time, and currency. Word problems identifying what a cubit, mite, gerah or shekel is equivalent to in modern day. Students will be learning the research necessary for comparing these biblical measurements with the ones they use today. They will exercise their knowledge of fractions, percentages, ratios, area, and volume and using mathematical tools such as rulers, Is tithing important – percentage problems 10%. The concepts of sets and subsets – study Revelations 5 – 16 and diagram the set relationship between the seven seals, seven trumpets, and seven bowls. Students will be helped to understand the interrelationships of the future Tribulation judgments. The measurements of the New Jerusalem are given in Revelation 21:15-17. Are they important? If not, why did God give them to us? E

### **Principle no. 3**

God’s unchangeable and dependable as reflected in the certainty of mathematical properties and procedures.

### **Principle no. 4**

God is an infinite God reflected in the infinitude of number sets, space, and functions. Every student needs to come to terms with their infinite nature – whether they spend their future in heaven or hell. Students who already know the Lord will be encouraged as they are reminded that they will spend eternity with their Saviour.

**Principle no. 5**

Design is shown in God's creation in nature. Looking at a hibiscus flower we can tell it was carefully designed by a wise Creator. We can examine the patterns of the petals and the pistil – arranged carefully. This should remind us that we can trust God to take care of the details of our life.

**Principle no. 6**

People have the God-given ability to discover what God has ordained and put in place.

**Principle no. 7**

People have the God-given wisdom and ability to solve complex problems. Integration must always be meaningful, or students will develop a lack of respect for God's truth. Bathing your preparation with prayer and personal study of Scripture will yield eternal results in the lives of your students.