

## Lego Probabilities



1. Sarah is making a Bible Lego representation of Moses at the Red Sea. Behind Moses are 35 human figures. She used 40 sand-coloured blocks to make a representation of the desert. To build the water that is about to be crossed she has 36 blue rectangular blocks and some inclines to clip on as waves. What are the different combinations possible to her to make the blue sea? How many blocks will she use to build the width of the Red Sea?



2. John wants to make a large sign for his church foyer to promote Bible Week. His plan is to make a Lego display exactly the same as in the model he has in the picture above, but three times larger. How many white clip-on discs will John need?



3. Zac is building a Lego classroom similar to the one he is in at his Christian school. To build the shorter back wall he has used 45 bricks, and for the sidewall including the transparent windows, he used 120 bricks. He has the two facing walls to complete. How many bricks in all will he require for the project, allowing for 10 less bricks for the new wall to enable the placement of a door?

4. Ancient Greeks playing dice using animal bones



4. Jesus hung on a cross dying, while at his feet men played, unaware of the cosmic significance of the event above them. Read John 19:23. Assume that the players had two modern 6-sided fair dice. The highest score thrown by a soldier so far is one 3 with a complementary 4. How many possibilities exist for a higher score to be thrown to win?



5. The probability of eight of the prophecies about the Messiah being fulfilled in one person's life time would be a mind boggling 1 in 1017 of a chance! Put another way, it's 10 to the 157th power. The odds against just 48 of the 300 or so Old Testament prophecies about the Messiah being fulfilled in one person's life time is 10 to the power 157. So all 300 being witnessed in the life of Jesus are astronomical.

If 1.0 is 100% certainty and 0.01 very unlikely, ascribe a value to the likelihood that the life of Jesus would see the entire ancient prophecies fulfilled?

6. There are books in the Bible named after people, e.g. Timothy. What is the probability that a random opening of the Bible will result in your eyes being presented with a book named after somebody?
  
7. Four students in a classroom all store their personal bibles on one select bookshelf. There are 3 KJV, 15 NIV and 7 copies of TMB, The Message Bible. The teacher directs a student to pick up a bible and read Acts 1: 21-26 about the apostles using dice to make a choice. What is the probability of the student selecting a KJV of the Bible? What is the probability of the student choosing a GNV, Good News version?
  
8. The Guinness Book of Records has the tallest man as being 2.72 metres high. Goliath was "six cubits and a span". Six cubits convert to 2.74 metres and he was huge not just a tall skinny basketball physique, 1 Sam 17:4. How much taller than you was Goliath? What is the ratio of your height to that of Goliath? The average height of skeletons excavated from that period is 1.64 metres. What is the ratio of your teacher's height to that of these ancient skeletons? Using the average weight of a common shekel makes Goliath's coat of mail  $11.38 \times 5000 = 56.9$  kilos.  
The weight of Goliath's iron spearhead was  $11.38 \times 600 = 6.83$  kilos. Estimate his body mass with and without armour.