

# Vitruvian Man Theory- truth or myth?

(3rd and 4th Class)

- Resources: Measuring tape (one per two pupils), string, record table (see below).
  Strands: Representing and interpreting data, fractions, decimals, ratio, length-measuring.
  Activity: Divide pupils into groups of two. Introduce pupils to Leonardo Da
  - Vinci's concept of human proportions. Show them how to properly measure parts of their body using a measuring tape. Pupils, in pairs, write theirs measurements to the worksheet.
- Questions: How many pupils have the exact Vitruvian proportions? How many children do not have the Vitruvian proportion? Why don't they?

### Teacher's note:

- 1. Discuss whether Vitruvian proportions are possible.
- 2. Investigate whether there is a strong relationship between arm span and height.
- 3. If you know your height, can you predict your arm span?
- 4. Discuss if arm span can be used as an ideal representation of height. Could this ratio have practical application? For instance, in a clinical setting, where a patient is confined to a wheelchair and unable to stand to have their height measured.



### Vitruvian Man Theory- truth or myth?





This is Leonardo da Vinci's drawing of the Vitruvian Man—a well known symbol of human proportions.

#### These are some of the proportions given for the Vitruvian Man:

- The span of the man's arms is equal to his height.
- The distance from the top of his head to the middle of his chest is one-quarter of his height.
- The distance from the middle of his chest to the top of his leg is one-quarter of his height.
- The distance from the top of his leg to the bottom of his knee is one-quarter of his height.
- The measurement from the elbow to the fingertips is also a quarter of the height
- The nose is halfway between the hairline and the chin.
- The eyebrows are halfway between the nose and hairline.
- The lips are halfway between the nose and chin.
- The head is one-eighth the total height.
- The hand is one-tenth the total height.
- The foot is one-sixth the total height.

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Let's investigate whether the popular beliefs about the Vitruvian Man 's proportions are true or a myth.



## 1. The span of the man's arms is equal to his height.

NAME	ARM SPAN (cm)	HEIGHT (cm)	Are the two values equal?		
			Yes	No	Almost
			Yes	No	Almost
Conclusion:					

## 2. The foot is one-sixth the total height.

NAME	FOOT LENGTH	HEIGHT	Is the foot length equal to one sixth of		
	(Ciri)	(CIII)	ine neight:		
			Yes	No	Almost
			Yes	No	Almost
Conclusion:					

## 3. The hand is one-tenth the total height.

NAME	HAND LENGTH (cm)	HEIGHT (cm)	Is the hand length equal to one tenth of the height?		
			Yes	No	Almost
			Yes	No	Almost
Conclusion:					