

Pediatrics and geometry



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Pediatrics are physicians who take care of children and adolescents. They take care of the patient since birth until the patient's teenage years.

Pediatrics have to do check ups, and examine the children and to make sure they are not ill. (1). They have to treat infections, injuries, many diseases and dysfunctions. Pediatrics also, have to do paperwork, they have to spend time doing administrative work, filling out forms, and sometimes teaching.

In high school you need to take biology, chemistry, physics, algebra, geometry and calculus. You must have a 3.5 GPA in order to get in med school. Then you need to go to the Med School. Take normal 4-year Bachelor of Science courses and on pre-med courses. (2)

Pediatrics use math in their daily basis. They use the most common math such as multiplying, dividing, adding and subtracting. They have to use math to solve problems when treating their patients.

When pediatrics are writing prescriptions they have to make sure how many doses give to child and it depends of the weight of the patient. If a pediatric is writing a prescription for amoxicillin for a children's ear infection, they have to consider the children weight and the dose. For example: the standard dosage for amoxicillin is 45mg/kg divides in a twice a day dosage. If the baby weight 22 that is 10kg then the dose is going to be 225 mg twice a day. (2)

They use geometry to calculate the children's body mass. It helps them to determine if the children is underweight, overweight or in a normal weight.

The standard formula for body mass is: (weight in kilograms)/ (height in meters) ². (2)

Pediatrics use math to check x-rays and CAT scans. (3) They need how to read x-rays so they can see what the problem of the patient is. Pediatrics is a career that math is very important. They use the metric system, to do a lot of equations related to the patients and its medication. (3)

When the pediatrics have to check a patient after a surgery in the stomach they use geometry when lay down a patient in the bed. They have to know the position in degrees. When the patient have something wrong with their lungs the pediatrics have to make sure they are in the bed the head has to be 10 degrees down and the feet need to be 10 degrees down.(4)

Pediatrics use geometry when they treat Tympanostomy (an ear infection that involves having liquids inside the ear) they need to know about geometry. They have to know the measurements and how many degrees the tube has to be reclined. They have to be careful, when they make the incision. Children are more apt to this infection; therefore, pediatricians have to be very careful to prevent them from cutting somewhere else. (5)

Pediatrics earn about \$13 to \$24 per hour. They earn anywhere from 60, 000 to 400, 000 a year.