

Physical Education Essential Questions (EQ)

The following Physical Education essential questions will be discussed and/or illustrated at some point during the physical education year-see curriculum map for timeline:

EQ1: Why is it important to stretch my muscles?

EQ2: What important principle must I incorporate to keep myself healthy and physically fit for a lifetime?

EQ3: How can individual differences enhance and contribute to group productivity?

EQ4: What are some characteristics to fair play?

EQ5: What does BALANCING a swim noodle look like? THROWING AND CATCHING?
THROWING THROUGH A TARGET

EQ6: Why is it important to develop specific sport skills to be successful in a game?

EQ7: What changes happen to your body when you are physically active?

EQ8: Connect how consideration for and cooperation with classmates improves success.

EQ9: What word does each letter in the F.I.T.T. Principal represent?

EQ10: Can you list one example of each word in the F.I.T.T. Principal?

EQ11: What is the difference between aerobic and anaerobic exercise?

EQ12: What is one example of an aerobic exercise? What is one ex. of an anaerobic exercise?

EQ13: What is the difference between offense and defense?

EQ14: Can you identify in order the 4 stages of exercise?

EQ15: Can you successfully make 5 over- and underhand throws to your partner using any ball?

EQ16: Can you successfully make 5 overhand and underhand throws into a bucket or hit a target 30 or more feet away?

EQ17: Can you demonstrate the “L” form with your shooting arm and make a basketball goal?

EQ18: What is physical activity and can you give me an example of a physical activity?

EQ19: Why is physical activity important for your health?

EQ20: Why is pacing yourself important in running or when doing a physical activity?

EQ21: Can you name 3 cues to performing a successful jump with a short rope?

EQ22: What elements should be considered when designing a game or movement activity?

EQ23: Can you give at least 1 example of how to improve the Health Related Fitness Component of aerobic fitness?

EQ24: Can you give at least 1 example of how to improve the Health Related Fitness Component of muscular strength?

EQ25: Can you give at least 1 example of how to improve the Health Related Fitness Component of muscular endurance?

EQ26: Can you give at least 1 example of how to improve the Health Related Fitness Component of flexibility?

EQ27: Can you give at least 1 example of how to improve the Health Related Fitness Component of body composition?

EQ28: What should your hands look like when catching a ball overhead? How about below your waist?

EQ29: Can you create and perform a dance routine with a group while following the dance rubric?

EQ30: Can you perform at least 10 gymnastics tumbling skills demonstrated in Physical Education?

EQ31: Can you name 2 cues important to making a successful bounce or chest pass?

EQ32: What does your pulse represent? Can you demonstrate how to take your pulse?

EQ33: Can you successfully make a front door entry, jump, and exit a turning long rope?

EQ34: What is the rhythm or beat to the music?

EQ35: What strategies would you use to verbally lead a blindfolded friend safely through general space?

EQ36: What is strategy and can you give an example of how to use strategy in a game?

EQ37: What is the difference between personal space and general space?

EQ38: Can you demonstrate an underhand serve and an overhand hit of a birdie or ball with a paddle or racquet?

EQ39: What is Cholesterol and why is too much cholesterol bad for your body?

EQ40: What is difference between weight training and weight-bearing exercise?

EQ41: Can you give me an example of a weight training and a weight-bearing exercise?

EQ42: What makes a person sedentary?

EQ43: Can you demonstrate how to hold, throw, and catch a Frisbee?

EQ44: Can you name and perform 4 locomotor movements?

EQ45: Can you tell me 2 scooter board rules of safety?

EQ46: Can you jump a single rope 20 or more times without a miss?

EQ47: Can you successfully dribble, pass, and stop a soccer ball with your feet?

EQ48: Can you tell the difference between your dominant and non-dominant hands and feet?

EQ49: Can you identify or name the 5 food groups?

EQ50: How would you use non-verbal communication to complete a task?

EQ51: What is rest and why is rest important for your body?

EQ52: How would you demonstrate balance?

EQ53: What is caloric expenditure? What must you do to increase your caloric expenditure?

EQ54: What does taking the FitnessGram Test help you learn?

EQ55: Can you tell me or show me an example of “greater than”, and “less than”?

EQ56: Explain how exercise can improve academic performance?

EQ57: What is money and why is money important? What symbols are used?

EQ58: Can you identify each coin and bill and tell me its monetary value? Let’s see.....

EQ59: Demonstrate your money-counting ability and how to calculate money-word problems.

EQ60: Why is telling time important? How do I read and demonstrate the time on a clock face?

EQ61: How do I use a map to locate each state and determine its capital?

EQ62: How would you demonstrate a forehand strike? How would you demonstrate a backhand strike? Show me.

EQ 63: Identify at least 4 tips to healthy eating

EQ 64: What is calcium and why do children need to consume calcium?

EQ 65: Identify at least 5 harmful facts of tobacco use and vaping.

EQ 66: What is personal hygiene? Give some examples of proper hygiene.

EQ 67: What is hydration and why is it so important to stay hydrated?

EQ 68: What are germs and ways to protect yourself from germs?

EQ 69: Identify at least 6 bone and skeleton facts.

EQ 70: What is a cavity and how can you help prevent getting cavities?

EQ 71: Is muscle better than fat?

EQ 72: How does sugar affect a growing child?

EQ 73: How does fat affect a growing child?

EQ 74: What are some interesting brain facts?

EQ 75: What are some interesting heart facts?

EQ 1: Why is it
important to
stretch my
muscles?

The Benefits and Importance of Stretching:

. **Stretching is important at any age.**

- It helps move joints through a full range of motion, by keeping ligaments and tendons flexible
- prevents injury
- improves agility and athletic performance
- encourages a healthful lifestyle
- helps ease sore or tight muscles
- promotes better posture
- avoids stiffness and speeds up recovery of muscles after running or playing sports
- encourages blood to circulate to the muscles and joints throughout the body
- Reduces stress.

EQ 2: What important principle must I incorporate to keep myself healthy and physically fit for a lifetime?

EQ 3: How can
individual
differences enhance
and contribute to
group productivity?

EQ 4:

What are some
characteristics to
fair play?

What is fair play in sport?

First and foremost, it's about players and athletes abiding by the rules of the competition.



What are the values of fair play in sport?

Fair play is also a commitment to take part in good spirit and with a good attitude, which includes:

Respect Modesty Friendship Equality

Fair play: abiding by the rules

Having a clear set of rules for all sports and at all levels is essential for making sure that they are played and practiced in a fair, safe and enjoyable way.

If everyone playing is aware of the rules, there should be no excuse for breaking them. Inappropriate behavior and rule breaking should be dealt with appropriately.

Rules and regulations are not only there to keep people in line, but can also enhance the enjoyment of the sport for everyone involved.

Examples of fair play

In September 2016, the Olympic triathlete, Alistair Brownlee was in second place and his brother, Jonny, was leading the race. He noticed that Jonny began slowing down and showed signs of heat stroke. Alistair showed fair play by helping his brother over the finish line first!



Nikki Hamblin, an athlete from New Zealand, sacrificed her own Olympic race to help her rival, US runner Abbey D'Agostino, when she fell down and seriously injured her leg. Nikki helped Abbey to her feet, and they completed the race together, demonstrating real 'Olympic spirit'.

EQ 5:

What does BALANCING a swim noodle look like?

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CATCHING? THROWING
THROUGH A TARGET

EQ 6: Why is it
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to be successful in a
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EQ 9: What word
does each letter in
the F.I.T.T.
Principal
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EQ 10: Can you
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each word in the
F.I.T.T. Principal?

EQ 11: What is the difference between aerobic and anaerobic exercise?

Rabbit/Turtle Demonstration

What is the difference between aerobic and anaerobic exercise?

Aerobic exercise is any activity that stimulates your heart rate and breathing to increase or go faster, but not so much that you can't keep doing the activity for more than a few minutes. **Anaerobic exercise** is where you get out of breath in just a few moments, like when you lift weights for improving strength, when you sprint, or when you climb a long flight of stairs.

Dancing, swimming, aerobics, biking, walking, hiking, climbing steps, and kick-boxing, and all of the cardio machines at the gym (treadmill, elliptical, bike, rower, stair-climber) are all examples of types of aerobic or cardio activities, but they can be anaerobic too if they are performed at a high enough intensity. The bottom line is that the intensity at which you perform an activity determines if it's aerobic or anaerobic.

EQ 12: What is one example of an aerobic exercise? What is one example of an anaerobic exercise?

Examples of **aerobic exercises** include cardio machines, spinning, running, swimming, walking, hiking, aerobics classes, dancing, and kickboxing. There are many other types. Simply do them at a moderate pace for longer periods of time. Aerobic exercises can become anaerobic exercises if performed at a HIGH level of intensity.

Anaerobic exercises are performed at maximum effort for a shorter period of time. Examples include:

- high intensity interval training (HIIT)
- heavy weight lifting
- plyometrics, jump squats, or box jumps
- sprinting (while running, cycling, or swimming)

EQ 13: What is
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EQ 14: Can you
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EQ 15: Can you
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a basketball goal?

EQ 18: What is

physical activity and
can you give me an
example of a
physical activity?

EQ 19: Why is
physical activity
important for
your health?

Why is Physical Activity Important for Your Health?

Children need to be active every day to promote their healthy growth and development.

Kids who establish healthy lifestyle patterns at a young age will carry them - and their benefits - forward for the rest of their lives.

Physical activity can help kids cope with stress. It also promotes:

- Healthy growth and development
- Better self-esteem
- Stronger bones, muscles and joints
- Better posture and balance
- A stronger heart
- A healthier weight range
- Social interaction with friends
- Learning new skills while having fun
- Better focus and concentration during school

EQ 20: Why is
pacing yourself
important in running
or when doing a
physical activity?

Pacing

Most young runners have a tendency to start too fast and don't plan for the later stages of their run.

Key Guidelines

Pacing is as much a mental concept as it is a physical one and takes time to learn. Explain to students that **pacing is about using your energy efficiently.**

Help runners learn how to control their speed and run at a constant speed with constant effort.

EQ 21: Can you
name 3 cues to
performing a
successful jump
with a short rope?

EQ 22: What elements should be considered when designing a game or movement activity?

EQ 23: Can you give at least 1 example of how to improve the Health Related Fitness Component of Aerobic Fitness?

Aerobic Fitness or Exercise

Aerobic exercise is movement that gets your blood pumping faster around your whole body. It makes your heart beat faster. It also makes your lungs take in more oxygen. This causes you to breathe faster during the exercise.

Aerobic exercise is important for kids. It helps keep their heart, lungs, and blood vessels healthy. Aerobic exercise can also help you keep or get to a healthy weight.

Kids who exercise tend to have:

- Better heart and lung fitness
- Lower levels of body fat
- Stronger bones and muscles
- Fewer symptoms of depression or sadness
- Better chances of being healthy adults without chronic disease

How much aerobic exercise should you get?

The U.S. Department of Health and Human Services recommends that kids get 60 minutes or more of physical activity each day. They advise that aerobic activity should make up most of those 60 minutes.

Kids should make sure to get vigorous aerobic activity on at least three days a week. What does that mean? Moderate aerobic activity means your heart will beat faster than normal and you will breathe harder than normal.

EQ 24: Can you give at least 1 example of how to improve the Health Related Fitness Component of Muscular Strength?

Muscular Strength

What is strength?

In practical terms, muscle strength is *how strong* you are.

In more specific terms:

Muscular strength is the ability to exert force against resistance. Exerting force may or may not mean there is movement of the joints or body. It might be that you carry an object in front of you and you contract your biceps, but there is no movement as your arms are neither raising nor lowering. This is called an isometric contraction. When the muscles contract and there is movement at a joint, such as a bicep curl, this is called an isotonic contraction.

Why is strength important?

Strength is important to enable you to perform every day functions such as fine motor skills (e.g. holding a pencil appropriately, cleaning teeth), gross motor skills (e.g. carrying heavy school bags, walking, running, skipping, playground skills such as climbing, and sporting skills such as catching, throwing and hitting a ball with a bat). Improving strength contributes to a higher metabolism, which increases caloric use both while at work and rest, which in turn reduces the risk of obesity. Another important benefit to note is that when you have good strength, you are more likely to have stronger tendons, ligaments and general joint health which reduces the risk of serious injury.

EQ 25: Can you give at least 1 example of how to improve the Health Related Fitness Component of Muscular Endurance?

Muscular Endurance

What is muscular endurance?

In practical terms, muscular endurance is *how long* your muscles can work.

Muscular endurance is the ability of a muscle to sustain or repeat contractions before becoming fatigued. Improving your muscular endurance will increase your stamina for daily tasks. In other words, the longer a muscle is used, the greater its endurance becomes. Exercises such as push-ups, sit-ups, pull-ups and weight training improve muscular endurance. Long periods of running, walking, and bicycling are some ways to improve your muscular endurance.

Why is muscular endurance important?

Muscular endurance is are important to enable children to perform every day functions such as fine motor skills (e.g. holding a pencil appropriately, cleaning teeth), gross motor skills (e.g. carrying heavy school bags, walking, running, skipping, playground skills such as climbing, and sporting skills such as catching, throwing and hitting a ball with a bat). Muscular endurance helps maintain proper posture all day long.

Improving strength and endurance contributes to a higher metabolism, which increases caloric use both while at work and rest, which in turn reduces the risk of obesity. Another important benefit to note is that when a child has good strength, they are more likely to have stronger tendons, ligaments and general joint health which reduces the risk of serious injury.

EQ 26: Can you give at least 1 example of how to improve the Health Related Fitness Component of Flexibility?

Stretching and Flexibility

For kids, stretches should be part of an overall, daily physical activity routine. Especially during growth spurts, children's and teens' muscles may be tight, and stretching can help.

Why Stretches Are Important

There are multiple advantages of stretching.

- Prevent injuries.
- Recovery after exercise.
- Maintain flexibility into adulthood.
- Agility
- Reduced muscle tension
- Improved joint health and range of motion
- Increased blood flow to the muscles

When Kids Should Stretch

Kids can stretch before and after other physical activities, such as running, playing soccer, and so on. Or they can do an activity that incorporates stretching, such as yoga. Overall, you should do some stretching at least three times a week.

Stretching done *before* sports or other fitness activities, as part of a [warm-up](#). *After* sports or physical play, kids should do a cool-down routine that includes some stretching.

Stretch into a position where you feel the muscle is activated (the sensation is of tightness, not pain), then hold, without bouncing.

EQ 27: Can you give at least 1 example of how to improve the Health Related Fitness Component of Body Composition?

Body Composition

Body Composition is the proportion of lean body mass to body fat; it is an integral part of health-related fitness.

Body composition is a major factor when looking at the overall health of an individual. The muscle versus fat ratio can show how susceptible a person is to diseases. If a person has a higher fat percentage versus the muscle percentage then the body functions in a lower standard. When a person has a healthy amount of fat to muscle ratio, they are well equipped to take care of themselves and have strong defenses against everyday things.

Body composition can be a challenge for many people. Genes (basically what your mom and your dad give you) play a huge role in how a person looks. Body composition can be one of your genetic factors, so you may always be a little big boned or thin as a stick! Whatever you are, as long as you are in a healthy range for your body you will be able to lead a quality life. Food gives your body fuel in the form of calories, which are a kind of energy. Your body needs a certain amount of calories every day just to function, breathe, walk around, and do all the basic stuff. But if you're active, your body needs more calories for energy. If you're not very active, your body won't need as many calories. If you eat enough to meet your calorie need, your body weight will stay about the same. If you eat more calories than your body needs, it may be stored as excess fat.

Improving **body composition** increases your metabolism and energy level. Aerobic exercise and activities like brisk walking, jogging, swimming, cycling and stretching along with good nutrition will decrease body fat and increase or maintain muscle mass.

EQ 28: What should
your hands look like
when catching a ball
overhead? How about
below your
waist?

EQ 29: Can you
create and perform a
dance routine with a
group while following
the dance rubric?

EQ 30: Can you
perform at least 10
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skills demonstrated in
Physical Education?

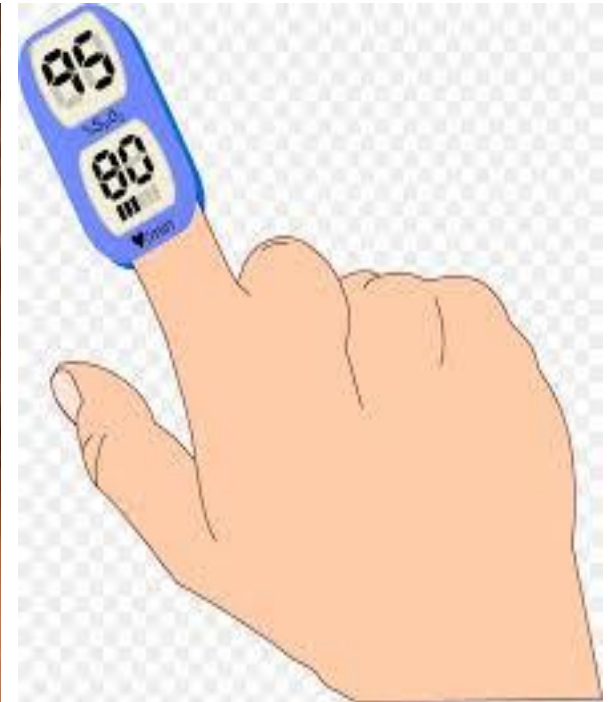
EQ 31: Can you

name 2 cues

important to making
a successful bounce
or chest pass?

EQ 32: What does
your pulse
represent? Can you
demonstrate how to
take your pulse?

Your heart is a pump which pumps blood out around your body through your arteries. You can feel the blood pumping where the arteries are close to your skin. These are your pulse points, and if you feel gently with your fingertips you can count how fast your heart is beating.



EQ 33: Can you
successfully make a
front door entry,
jump, and exit a
turning long rope?

EQ 34: What is
the rhythm or
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EQ 35: What strategies
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EQ 36: What is strategy and can you give an example of how to use strategy in a game?

EQ 37: What is the difference between personal space and general space?

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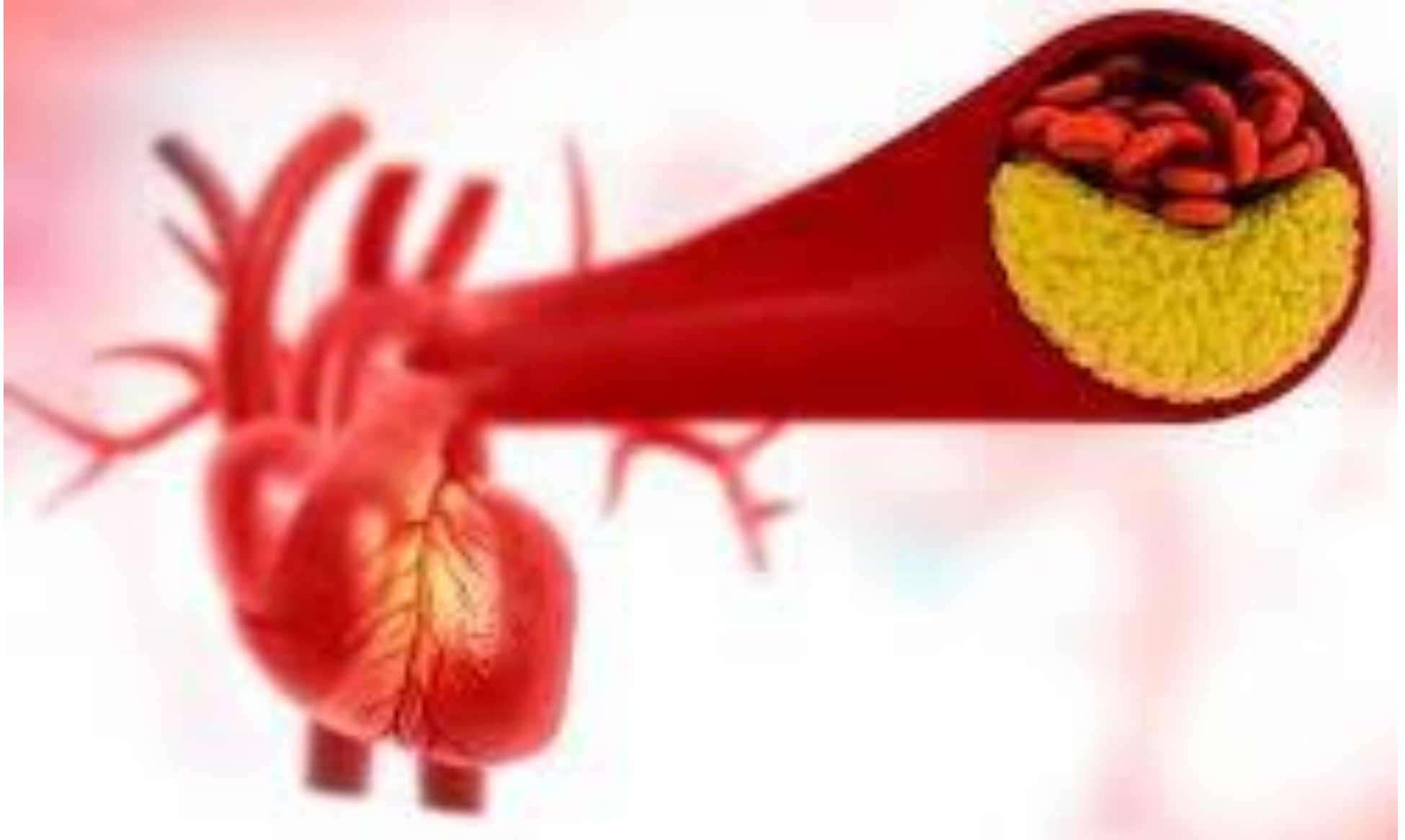
EQ 39:

What is Cholesterol
and why is too much
cholesterol bad for
your body?

What Is Cholesterol? Cholesterol is a waxy, fat-like substance made by the liver. Cholesterol helps build cell membranes and is used to make hormones, like estrogen and testosterone, and vitamin D. Heart disease has its roots in childhood. So high levels of cholesterol in children can increase their chances of heart disease and strokes as adults.

Where Does Cholesterol Come From?

The liver makes all the cholesterol that the body needs. But cholesterol also comes from some of the foods we eat. Foods that are high in saturated fat and trans-fat also can increase the liver's production of cholesterol.



EQ 40: What is the difference between weight training and weight-bearing exercises?

EQ 41: Can you give me an example of a weight training and a weight-bearing exercise?

EQ 42:

What makes a
person
sedentary?

Sedentary behavior is time when children are doing very little physical movement. This includes sitting for long periods of time in a car, watching TV or playing on tablets, computers, or phones.

A sedentary person, when given the option to play on the trampoline or go and ride a bike will always choose to watch TV or play video games.

It is recommended that your recreational screen time is no more than 2 hours per day along with limited sitting for extended periods.

Being less sedentary can help children:

Do better in school, improve their self-confidence, have more fun with their friends, improve your fitness, and maintain a healthy body weight.

It is okay to be lazy and take breaks and watch TV/play video games. You just need to maintain a healthy balance.

EQ 43: Can you
demonstrate how
to hold, throw, and
catch a Frisbee?

EQ 44: Can you
name and perform
4 locomotor
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EQ 45:

Can you tell me
2 scooter board
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EQ 46: Can you
jump a single rope
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EQ 47: Can you
successfully dribble,
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soccer ball with
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EQ 48: Can you tell
the difference between
your dominant and
non-dominant hands
and feet?

EQ 49: Can you
identify or
name the 5 food
groups?

The 5 Food Groups

The key to healthy eating is to enjoy a variety of nutritious foods from each of the **5 food groups**. If you eat a variety of foods from each of these groups, your body will receive all the nutrients and vitamins it needs to function.

1. **Dairy and/or their alternatives:** the foods in this group are excellent sources of calcium, which is essential for strong and healthy bones. Not many other foods in our diet contain as much calcium as these foods.
2. **Fruit:** fruit provides vitamins, minerals, dietary fiber and many phytonutrients (nutrients naturally present in plants), that help your body stay healthy.
3. **Grain (cereal) foods:** always choose wholegrain and/or high fiber varieties of bread, cereals, rice, pasta, noodles, etc. Refined grain products (such as cakes or biscuits) can be high in added sugar, fat and sodium.
4. **Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans:** our bodies use the protein we eat to make specialized chemicals such as hemoglobin and adrenalin. Protein also builds, maintains, and repairs the tissues in our body. Muscles and organs (such as your heart) are primarily made of protein.
5. **Vegetables and legumes/beans:** vegetables should make up a large part of your daily food intake and should be encouraged at every meal (including snack times). They provide vitamins, minerals, dietary fiber and phytonutrients (nutrients naturally present in plants) to help your body stay healthy.

EQ 50: How would
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EQ 51: What is
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EQ 52: How
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EQ 53: What is
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What must you do to
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Are Calories Bad for You?

- Calories aren't bad for you. Your body needs calories for energy. But eating too many calories — and not burning enough of them off through activity — can lead to weight gain.
- Some people watch their calories if they are trying to lose weight. Most kids don't need to do this, but all kids can benefit from eating a healthy, balanced diet that includes the right number of calories — not too many, not too few. But how do you know how many calories you need?

How Many Calories Do Kids Need?

- Kids come in all sizes and each person's body burns energy (calories) at different rates, so there isn't one perfect number of calories that every kid should eat. But there is a recommended range for most kids between 6 and 12 years old: 1,600 to 2,200 per day, depending on how active they are.
- Kids who are active and move around a lot need more calories than kids who don't.
- If you eat more calories than you need, the body changes extra calories to fat. Too much fat can lead to being overweight and other health problems. Only your doctor can say if you are overweight, so check with him or her if you're concerned. And never go on a diet without talking to your doctor!
- High-calorie foods — such as sugary sodas, candy, and fast food — quickly add up to too many calories. Instead, eat a healthy, balanced diet. Exercising and playing are really important, too, because physical activity burns calories.

How the Body Uses Calories

- Your body needs calories just to operate — to keep your heart beating and your lungs breathing. As a kid, your body also needs calories and nutrients from a variety of foods to grow and develop. And you burn off some calories without even thinking about it — by walking your dog or making your bed.
- But it is a great idea to play and be active for an 1 hour or more every day AND build muscle. That means time spent playing sports, playing outside, or riding your bike. It all adds up. Being active every day keeps your body strong and can help you maintain a healthy weight.
- Watching TV and playing video games won't burn many calories at all, which is why you should limit those activities to no more than 2 hours per day. A person burns only about 1 calorie per minute while watching TV, about the same as sleeping!

EQ 54:

What does taking
the FitnessGram
Test help you learn?

EQ 55: Can you tell
me or show me
an example of
“greater than”, and
“less than”?

EQ 56: Explain
how exercise can
improve academic
performance?

Physical activity and exercise is not only essential for healthy growth and development, it's also important to learning.

- Research shows that exercise or physical activity – whether it's team sports, bike riding, swimming or playground games – has positive effects on the brain and on school performance.
- Physical activity has a direct impact on the behavior and development of the brain.
 - The flow of oxygen to the brain is increased
 - The number of brain neurotransmitters is increased, which assists your ability to focus, concentrate, learn, remember and handle stress
- Physical activity has an impact on cognitive skills such as concentration and attention, and it also enhances classroom attitudes and behaviors, all of which are important components of improved academic performance.
- Physical activity boosts children's self-esteem.
- Physical activity nurtures relationships with peers, parents and teachers.
- Regular and organized physical activity training promotes life skills (interpersonal, self-regulation) and core values like respect and social responsibility.
- Regular physical activity induces better sleep.

So whether you exercise 1 hour or 20 minutes, physical activity and exercise can make a significant difference in your health and academic performance.

EQ 57: What is
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What symbols
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EQ 58: Can you
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Let's see.....

EQ 59: Demonstrate
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EQ 60: Why is telling
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EQ 61: How do I
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EQ 62: How would

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forehand strike? How
would you demonstrate a
backhand strike?

Show me.

EQ 63: Identify
at least 4 tips to
Healthy Eating.

Tips for healthy eating:

- . Eat 3 meals each day – breakfast, lunch and dinner – and eat healthy snacks in between. This gives your body the fuel it needs to keep you going throughout the day and stops you from feeling hungry at your next meal.
- . **Eat a variety of foods from the 5 food groups every day - fruit, vegetables, bread and cereals, meat or meat alternatives and dairy foods. This will give you all the energy, vitamins and minerals your body needs.**
- . Take it easy on the sugary and fatty foods, like candy, soft drinks, chips and fried foods. Too many of these foods can be bad for you and make you put on unhealthy weight.
- . **Drink plenty of water throughout the day.**

EQ 64: What is
calcium and
why do children
need calcium.

What is calcium?

Calcium is a mineral. Our bodies contain more calcium than any other mineral. As much as 99 percent of the calcium in our bodies is stored in our teeth and bones, although it is also present in our blood, muscle, and the fluid between body cells.

Why do children need calcium?

Our bones can be seen as the “**Bank of Calcium**”. If calcium is not deposited, it will be withdrawn from the bones to be used in other areas of the body. If this keeps happening over time, bones can become weak and brittle which may lead to **osteoporosis**.

The amount of calcium absorbed into our bones is dependent on the amount of calcium that we eat and how much Vitamin D we get. Vitamin D is essential for calcium absorption and is gained primarily through **sunlight**. It can also be found in foods such as fish and egg yolks. Many foods are now fortified with vitamin D.

How can I get the calcium I need?

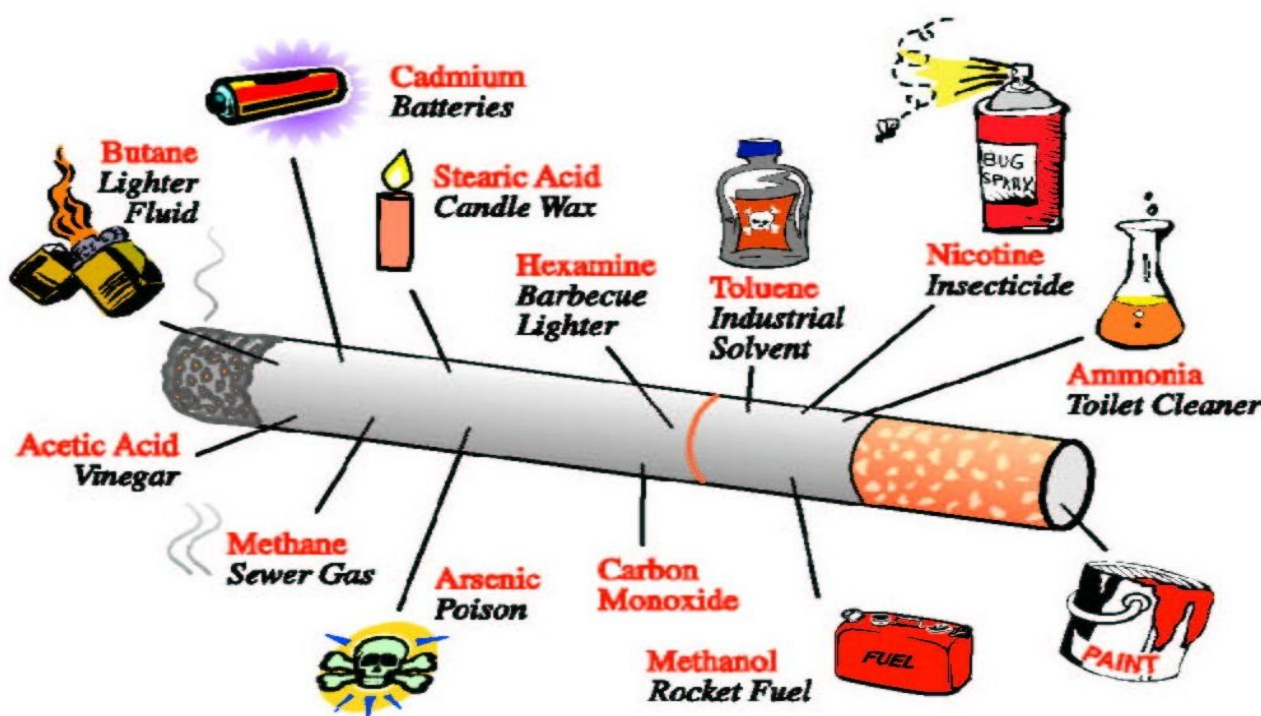
The best way to get calcium is by eating foods such as [dairy products](#) which contain high amounts of calcium. Top calcium-rich choices include: Dairy products such as cheese, milk, and yogurt;

Green, leafy vegetables such as spinach and kale; Foods fortified with calcium such as juices, tofu, cereals, rice milk, and soymilk

EQ 65: Identify
at least 5 facts
of tobacco use
and vaping.

Although once considered cool and glamorous this practice is now known as a nasty addictive habit that can kill you and those around you. Here are some facts about smoking:

1. Cigarettes can contain more than 4,000 ingredients, which, when burned, can also produce over 200 'compound' chemicals. Many of these 'compounds' have been linked to lung damage.
2. For every person that dies from a smoking-related disease, there are 20 more who suffer from at least one serious illness associated with smoking.
3. **Nicotine reaches the brain within 10 seconds** after smoke is inhaled. It has been found in every part of the body.
4. Scientists claim the average smoker will lose 14 years of their life due to smoking.
5. Smoking is the cause of 1 in 5 deaths in the U.S annually.
6. Tobacco use is the leading preventable cause of death.
7. Are you sure you want to light up another cigarette?



EQ 66: What is
personal hygiene?
Give some
examples of good
hygiene.

Personal hygiene is how you take care of your body. Maintaining good hygiene practices reduces the spread of illness and risk of medical conditions caused by not taking care of yourself. It also increases self-confidence and positively impacts personal relationships.

- **Wash Your Hands Frequently:** Hand washing is one of the most effective ways to maintain personal hygiene and stop the spread of disease.
- **Bathe:** shower or take a bath at least twice a week. Washing your body removes dead skin cells and dirt and is a preventative measure to reduce the risk and spread of disease.
- **Facial cleanliness:** Use soap and clean, running water to remove dirt, oil, and unwanted debris from your face. This especially helps as you get older to help limit or avoid acne.
- **Wear Clean Clothes:** Dirty clothes could harbor bacteria that leads to body odor or could even result in a skin infection.
- **Brush and Floss Your Teeth Daily:** Brush your teeth twice a day, once in the morning and once at night, and floss at least once a day. Also be sure to maintain regular dental checkups.
- **Get Restful Sleep:** Getting enough sleep is essential to our overall wellbeing.
- **Clip Fingernails & Toenails:** appropriate hand and foot hygiene includes diligently cleaning and trimming nails, which may harbor dirt and germs and can contribute to the spread of some infections, such as [pinworms](#).
- **Create a Routine:** In order to maintain good personal hygiene practices, it's best to create a routine. This way, you'll make a daily list of things you need to do to stay clean and healthy and make sure you continue to practice proper personal hygiene.

EQ 67: What is
hydration and why
is it so important to
stay hydrated?

Hydration Facts

Humans have an unquenchable thirst for water. It's the most important nutrient for us on the planet, and ideally, we should be drinking water every day. **Up to 60% of the human adult body is water.** Dehydration is one of the most common preventable medical conditions in the world, and it affects millions in the United States.

1. 3 out of 4 Americans Are Chronically Dehydrated.

2. Dehydration Causes Fatigue. Unsurprisingly, fatigue is a common dehydration symptom, and it's said to be the No. 1 cause of midday fatigue.

3. Thirst Means You're Dehydrated. Dehydration triggers the body's thirst response. So when you feel thirsty, dehydration is already setting in, especially following intense exercise or when battling viruses.

4. Dehydration Causes Foggy Memory, and Irritability. With children, studies are more conclusive that hydration can improve attention and memory.

5. Muscles are comprised of 60-70% water. Dehydration negatively effects strength and power very quickly while doing nothing to help lose fat.

6. On a daily average, a person loses 80 ounces or ten, small glasses of water through breathing, sweating and other body processes. This does not take into account sweating through exercise! Those ten glasses of water need to be replaced daily, in addition to any lost during exercise.

7. It takes 24-48 hours (1-2 days) to rehydrate your body after being dehydrated. It is impossible to drink enough immediately before competition, or during competition, to make up for being dehydrated.

EQ 68: What are
germs and ways
to protect yourself
from germs?

Some kids may think that germs are bugs or cooties or other gross stuff. Actually, germs are tiny organisms, or living things, that can cause disease. Germs are so small and sneaky that they creep into our bodies without being noticed. In fact, germs are so tiny that you need to use a microscope to see them. When they get in our bodies, we don't know what hit us until we have symptoms that say we've been attacked!

What Types of Germs Are There?

The four major types of germs are: bacteria, viruses, fungi, and protozoa. They can invade plants, animals, and people, and sometimes they make us sick.

Bacteria: Some infections that bacteria can cause include ear infections, sore throats, cavities, and pneumonia.

But not all bacteria are bad. Some bacteria are good for our bodies — they help keep things in balance. Good bacteria live in our intestines and help us use the nutrients in the food we eat and some bacteria are used by scientists in labs to produce medicines and vaccines.

Viruses: When viruses get inside people's bodies, they can spread and make people sick. Viruses cause chickenpox, measles, flu, and many other diseases. **Fungi** love to live in damp, warm places. An example of something caused by fungi is athlete's foot, that itchy rash that teens and adults sometimes get between their toes.

Protozoa are one-cell organisms that love moisture and often spread diseases through water. Some protozoa cause intestinal infections that lead to diarrhea, nausea, and belly pain.

How Can You Protect Yourself From Germs?

Most germs are spread through the air in sneezes, coughs, or even breaths. Germs can also spread in sweat, saliva, and blood. Some pass from person to person by touching something that is contaminated, like shaking hands with someone who has a cold and then touching your own nose. Steering clear of the things that can spread germs is the best way to protect yourself. Protect yourself by.....**Hand washing!**

Cover your nose and mouth when you sneeze

Get all the routine **immunizations** from your doctor. No one likes to get shots but these help keep your immune system strong and prepared to battle germs. You can also keep your immune system strong and healthy by **eating well, exercising regularly, and getting good sleep.**

EQ 69: Identify
at least 6 bone
and skeleton
facts.

Your Bones and Skeleton

Our bones and skeletal structure are a main requirement for our bodies to be able to move. Without our bones, we would be more like a slug, just a 'bag of blood, fluids and skin'.



When we are born there are around 300 bones in the human skeleton. By the time we reach adulthood, some of these bones have fused together, so we only end up with 206 bones.

Bones are in a constant state of growth from the time we are born until around our mid- twenties. By the time we reach the age of thirty, our bone mass has achieved its maximum density.

Bones are incredible. If you break a bone it will try to repair itself and re-grow. Sometimes it doesn't grow back in the right way so that's why doctors put a splint or cast over the broken bone area to make sure they grow back properly.

- You have 26 bones in your foot.
- You have 27 bones in your hand.
- Some bones help protect important organs in the body. For example, the rib cage helps to protect your heart, liver and lungs.
- The inside of our bones is filled with marrow, which is a soft tissue.
- When bones are connected they form a joint.
- The brain is protected by 8 different types of bones.
- The longest bone in the body is the 'femur'. This is the thigh bone and is also considered to be the strongest bone in the body.
- Both calcium and vitamin D are important to help in keeping healthy, strong bones.

EQ 70: What is a cavity and how can you help prevent getting cavities?

What is a Cavity?

Cavity. That's the word no one wants to hear at the dentist's office. A cavity develops when a tooth decays, or breaks down. A cavity is a hole that can grow bigger and deeper over time. If you have a cavity, it's important to get it repaired.

But why would your tooth develop a hole? Blame plaque. That's a sticky, slimy substance made up mostly of the germs that cause tooth decay. The bacteria in your mouth make acids and when plaque clings to your teeth, the acids can eat away at the outermost layer of the tooth, called the **enamel**.

If you don't go to the dentist, the acids can continue to make their way through the enamel, and the inside parts of your tooth can begin to decay. If you've ever had a toothache or heard an adult complain about one, it may have been because there was a cavity that reached all the way inside a tooth, where the nerve endings are. Ouch!

Your dentist will carefully examine your teeth and may take X-rays. If your dentist discovers a cavity, he or she can repair it for you by first removing the rotted part of your tooth with a special drill. The dentist then fills the hole in your tooth with a special material. The result is called a filling.

Does it hurt? Sometimes it does, but your dentist can give you an anesthetic. That's a kind of medicine that will numb the area around the problem tooth while you're getting your new filling.

Cavity Prevention Tips

Though cavities can be repaired, try to avoid them by taking care of your teeth.

Brush your teeth with fluoride toothpaste after every meal or at least twice a day. Bedtime is an important time to brush.

Brush up and down in a circular motion. Gently brush your gums as well to keep them healthy.

Floss your teeth once a day to remove plaque and food that's stuck between your teeth.

Limit sweets and sugary drinks, like soda or juice.

See your dentist twice a year for regular checkups. We hope you'll hear those two wonderful words: "No cavities!"

EQ 71:

Is muscle
better than fat?

What's the difference between a pound of fat and a pound of muscle?

Muscle and fat actually differ in *density*, meaning a pound of fat takes up more space than a pound of muscle. Muscle, which is much denser than fat, takes up four-fifths as much space as fat does. Because of this, even if two people are the same height and weight, their bodies may look very different depending on their body fat percentages.

Is muscle better than fat? Not really

There are many additional benefits to having a higher lean body mass besides the most popular reason—having a leaner physique.

Muscle helps burn calories when your body is at rest. Muscle burns more calories than fat throughout the day even when you aren't working out. Because you're able to burn more calories during rest, adding muscle may help you lose fat.

Your body definitely needs fat.

Dietary **fats** are **essential** to give your **body** energy and to support cell growth. They also help protect your organs and help keep your **body** warm. **Fats** help your **body** absorb some nutrients and produce **important** hormones, too. **Fat** helps give your **body** energy, protects your organs, supports cell growth, keeps cholesterol and blood pressure under control, and helps your **body** absorb vital nutrients.

EQ 72:

How does sugar
affect a growing
child?

Sugar and Kids:

Q: How does sugar affect a growing child?

A: When you fill up on sugar-sweetened foods, you may have little room left for the nutritious options that growing bodies need, such as fruits, vegetables, whole grains, low-fat dairy and lean protein. Plus, too much sugar can also lead to weight gain and increase the risk of you developing cavities.

Q: Does sugar intake during the formative years affect a child's risk of developing chronic health problems?

A: It could. As with anything, too much sugar during your childhood may lead to unhealthy cravings as you grow older. In excess, sugar can lead to [obesity](#), which puts a child at risk for developing high blood pressure, elevated cholesterol levels and type 2 diabetes. Rapid increases and decreases in blood sugar can lead to mood changes and even depression. Overweight and obesity are also associated with bone and joint problems and some forms of cancer.

Q: Does your body need sugar?

A: Yes, the body uses sugars and starches from carbohydrates to supply glucose to the brain and provide energy to cells around the body. Pay attention to [nutrition labels](#). Choosing a drink? Select a drink with the fewest grams of added sugar. Looking for a mid-afternoon snack? Choose fruits and vegetables over packaged products.

EQ 73:

How does fat
affect a growing
child?

Fat

Fat is one of the 3 nutrients (along with protein and carbohydrates) that supply calories to the body.

Fat is essential for the proper functioning of the body. Fats provide essential fatty acids, which are not made by the body and must be obtained from food. They are important for controlling inflammation, blood clotting, and brain development.

Fat serves as the storage substance for the body's extra calories. It fills the fat cells (adipose tissue) that help insulate the body. Fats are also an important energy source. When the body has used up the calories from carbohydrates, which occurs after the first 20 minutes of exercise, it begins to depend on the calories from fat.

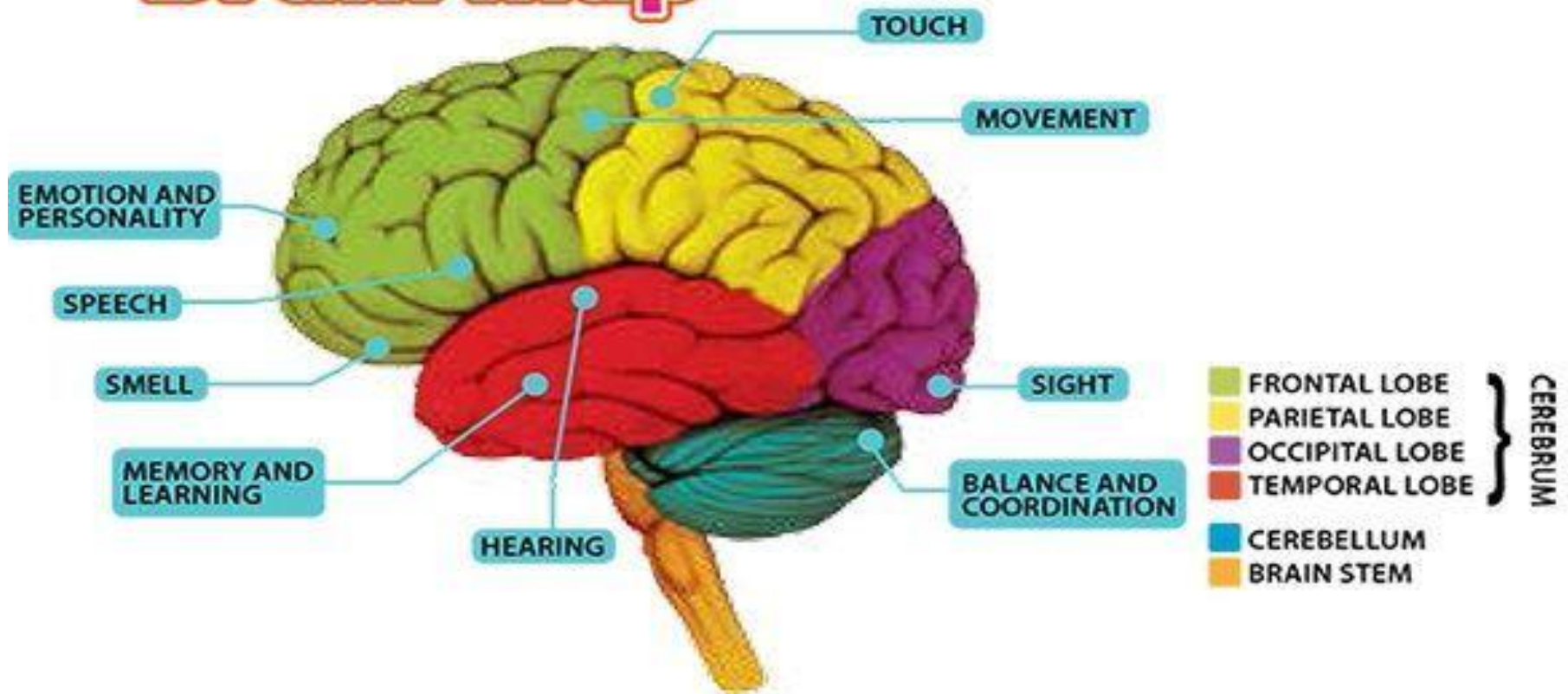
Healthy skin and hair are maintained by fat. Fat helps the body absorb and move the vitamins A, D, E, and K through the bloodstream.

Side Effects

Eating too much saturated fat is one of the major risk factors for heart disease. A diet high in fat causes a soft, waxy substance called cholesterol to build up in the arteries. Too much fat also increases the risk of heart disease because of its high calorie content, which increases the chance of becoming obese.

EQ 74: What are
some interesting
Brain Facts?

Brain map



Interesting Brain Facts:

Your brain is faster & more powerful than a supercomputer! It travels up to an impressive 268 mph.

Your brain generates enough electricity to power a lightbulb.

Exercise helps make you smarter.

The human brain weighs 3 pounds and is made up of 60% fat.

Your brain isn't fully formed [until age 25](#).

Your brain's storage capacity is considered [virtually unlimited](#).

EQ 75: What

are some

interesting

Heart Facts?

You may not think about your heart often, but here are some fascinating facts you don't want to miss. Your heart does amazing things day in and day out. The main function of your heart is to keep oxygenated blood circulating throughout your body. In fact, you may be surprised by how hard it works to keep you alive. Here are 10 things you may not know about this incredible organ:

1. Your heart beats over 100,000 times per day.
2. Your heart pumps about 1.5 gallons of blood every minute. Over the course of a day, that adds up to over 2,000 gallons.
3. There are 60,000 miles of blood vessels in your body. That's enough to go around the world twice.
4. The average heartbeat of a woman is about 8 beats a minute faster than a man's heartbeat.
5. An adult heart is about the size of 2 hands clasped together. A child's heart is about the size of a fist.
6. Other than the cornea, every cell in the human body gets blood from the heart.
7. The right side of your heart pumps blood into your lungs. The left side of your heart pumps blood back through your body.
8. The greatest number of heart attacks occur each year on Christmas Day. The day after Christmas and New Year's Day are close behind.
9. More heart attacks happen on a Monday than any other day of the week.
10. Heart disease is the number 1 cause of death in the United States. That's why it's important to be good to your heart by following a heart-healthy lifestyle.

Word Wall (WW)

I implement the following Physical Education vocabulary words on a regular basis because I believe it will make a significant difference in building students' background knowledge and comprehension. All vocabulary words displayed on the gym wall will be discussed, illustrated, and/or practiced through various activities at some point during the physical education year. See curriculum map for timeline:

WW1: Triceps and Biceps Muscle Poster Illustration and Discussion

WW2: Hamstrings and Quadriceps Muscle Poster Illustration and Discussion

WW3: Deltoids and Trapezius Muscle Poster Illustration and Discussion

WW4: Gluteals and Gastrocnemius Muscle Poster Illustration and Discussion

WW5: Abdominals and Obliques Muscle Poster Illustration and Discussion

WW6: Latissimus Dorsi and Pectorals Muscle Poster Illustration and Discussion

WW7: Aerobic and Anaerobic Exercise

WW8: Physical Activity (Moderate and Vigorous)

WW9: Rest

WW10: Pacing

WW11: Weight Training

WW12: Sedentary

WW13: Caloric Expenditure

WW14: Heart Rate

WW15: Dominant and Non-dominant

WW16: 4 Stages of Exercise (warm up, stretch, workout, cool down)

WW17: F.I.T.T. Principle (F=Frequency, I=Intensity, T=Time, T=Type)

Components of Health Related Fitness:

WW18: Cardio-respiratory endurance

WW19: Muscular Strength

WW20: Muscular Endurance

WW21: Flexibility

WW22: Body Composition

WW23: Test Tubes of Fat and Sugar Display and Discussion

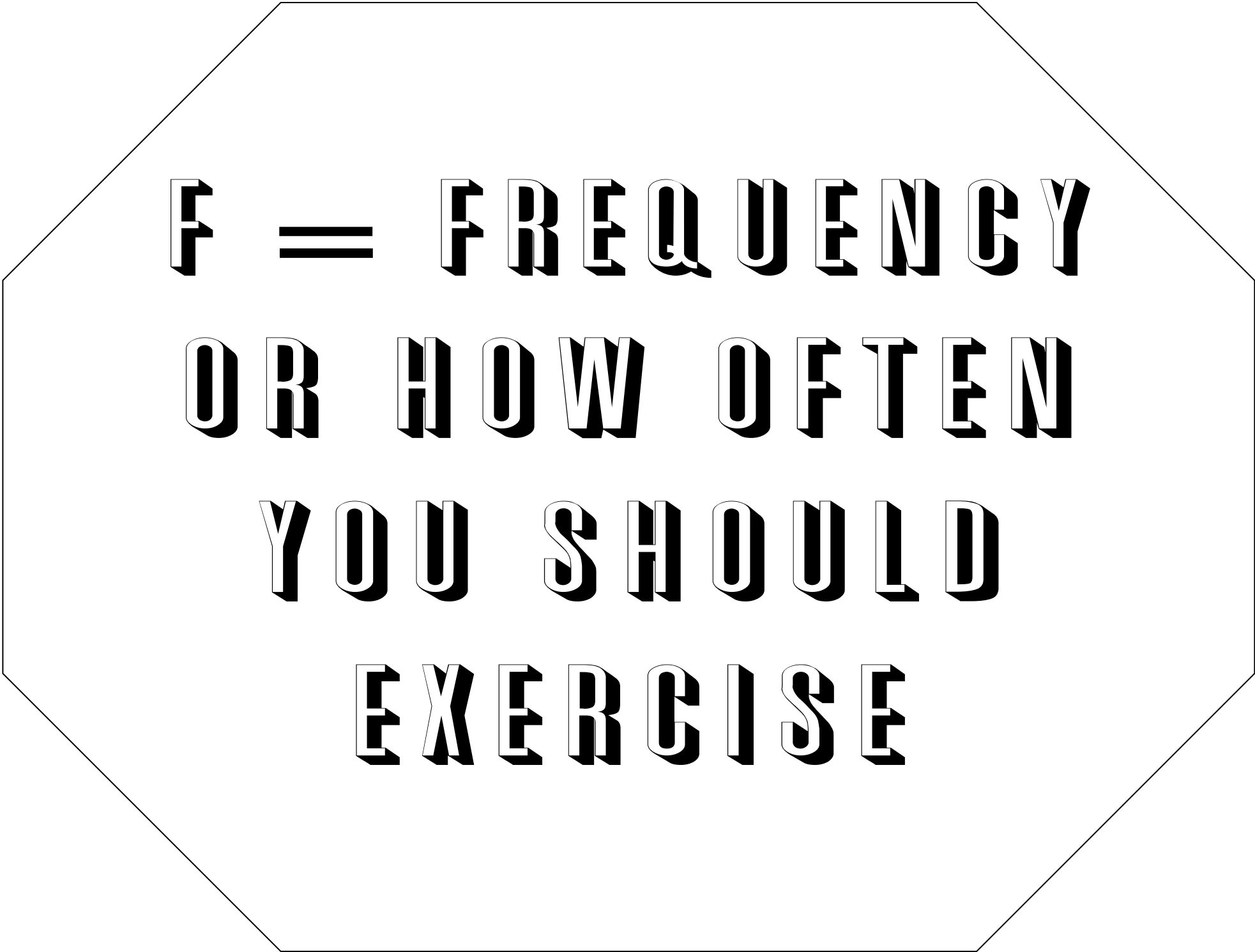
WW24: Handheld Fat and Muscle Display and Discussion

WW25: A Pack of Toxic Tar Cigarette Smoking Display and Discussion

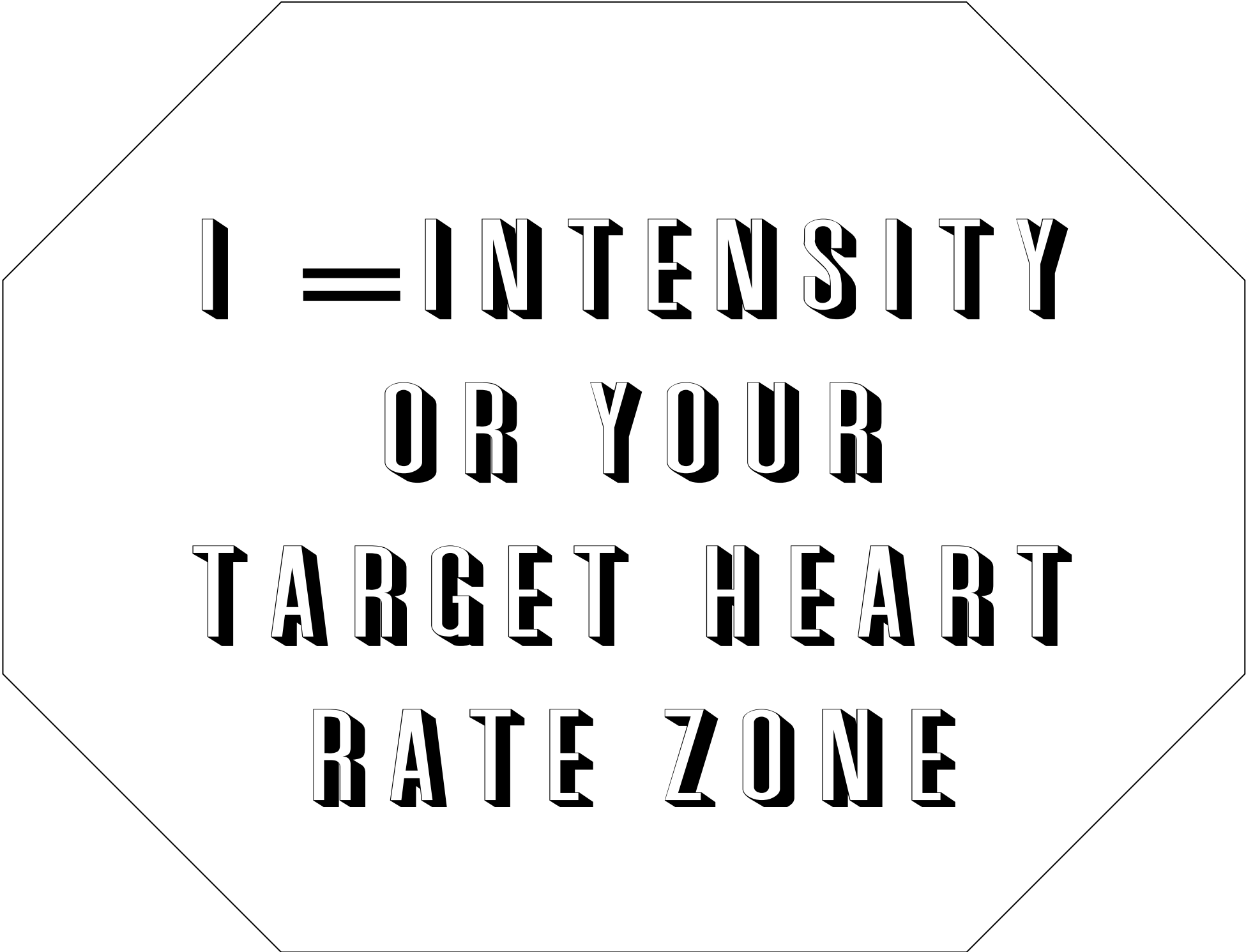
WW26: Healthy Artery and Clogged Artery Display and Discussion

F.I.T.T.

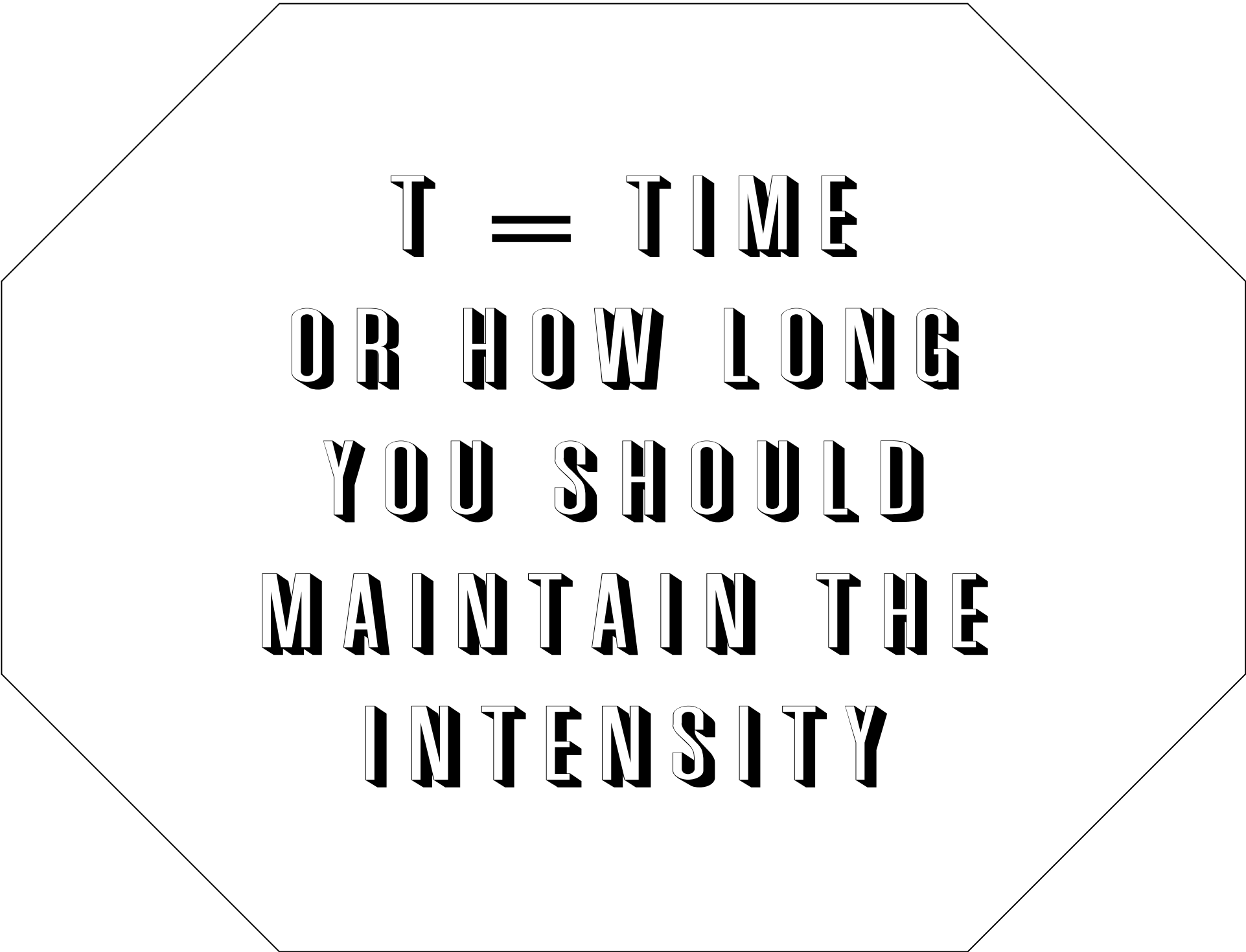
PRINCIPLE



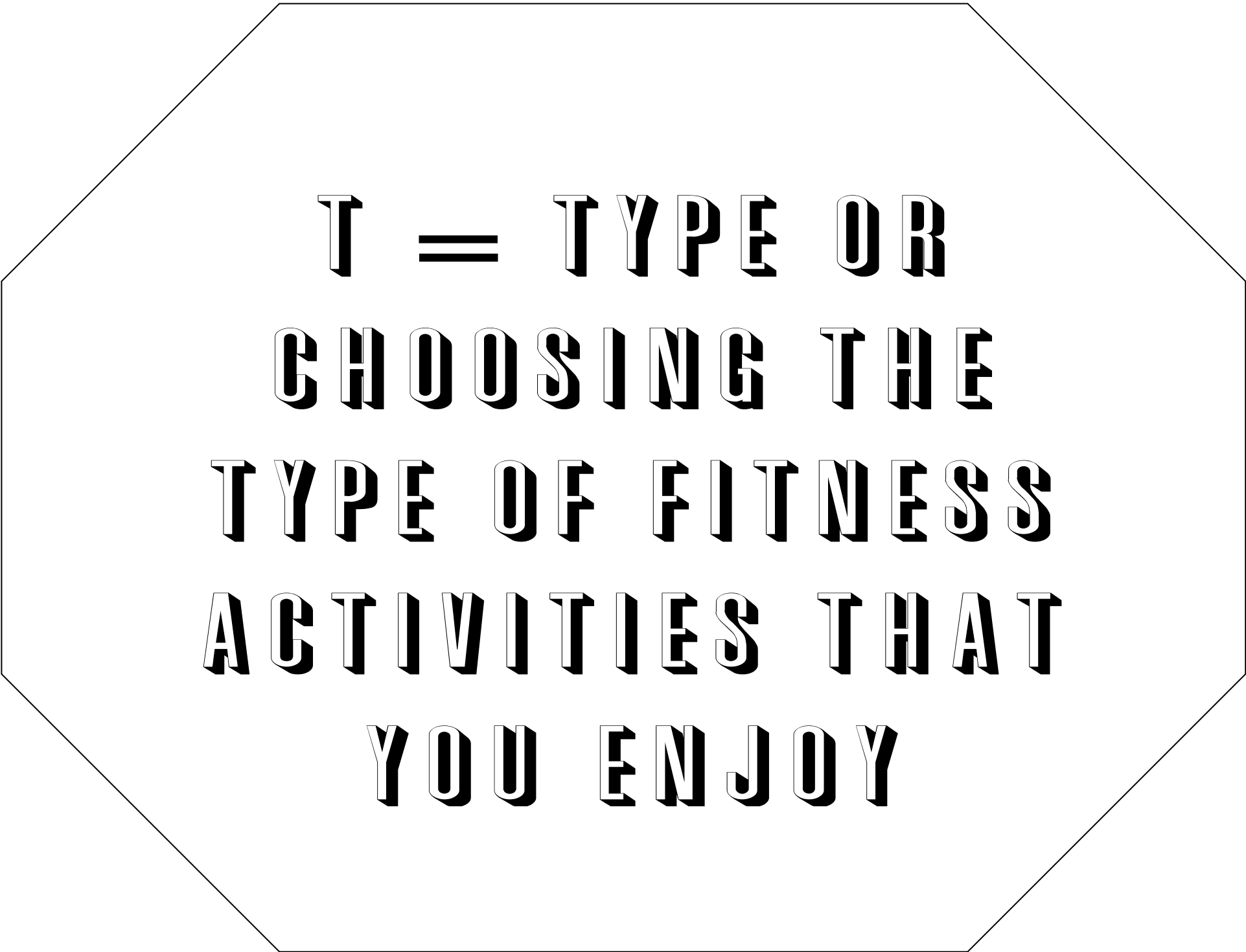
F = FREQUENCY
OR HOW OFTEN
YOU SHOULD
EXERCISE



**I = INTENSITY
OR YOUR
TARGET HEART
RATE ZONE**



**T = TIME
OR HOW LONG
YOU SHOULD
MAINTAIN THE
INTENSITY**



**T = TYPE OR
CHOOSING THE
TYPE OF FITNESS
ACTIVITIES THAT
YOU ENJOY**

EXERCISE

CALORIC

EXPENDITURE

ANAEROBIC

AEROBIC

STRETCH

WARM-UP

WORKOUT

COOL DOWN

SEDENTARY

PHYSICAL

ACTIVITY

STAGES OF EXERCISE

COMPONENTS OF HEALTH-

RELATED

FITNESS

AEROBIC

ENDURANCE

FLEXIBILITY

MUSCULAR

STRENGTH

MUSCULAR

ENDURANCE

BODY

COMPOSITION

HEART

RATE

REST

WEIGHT

TRAINING

PACING

NON-

DOMINANT

DOMINANT

MODERATE

VIGOROUS

HELPERS

OF THE

MONTH