



# ***Healthy Students = Better Test Scores***

***Presented By:  
Aaron Hart***

**The SPARK Programs  
1-800-SPARK-PE  
[www.sparkpe.org](http://www.sparkpe.org)**

## Healthy Kids = Better Test Scores

### ***We know why – don't we?!***

John Ratey, author of *Spark: The Revolutionary New Science of Exercise and the Brain* states: "*Exercise itself doesn't make us smarter. Instead, exercise makes us more able to learn and focus and optimizes the brain for learning.*"

### ***Healthy Children are Better Learners!***

Children who practice healthy behaviors have:

- \* Improved attention span
- \* Improved attendance
- \* Improved behavior
- \* Increased concentration
- \* Reduced tardy rates
- \* Fewer visits to school nurse

Physical activity is important. Why?

- \* Improves Brain Function
- \* Increases Cerebral Blood Flow
- \* Increases Energy and Concentration Levels
- \* Improves Alertness
- \* Increases Self esteem
- \* Decreases disruptive behaviors

### ***Data please!***

California Study: Compared academic & fitness scores of grade 5, 7 &9 students.

Results:

- \* Schools with more fit students experienced higher gains
- \* Higher achievement was associated with higher levels of fitness at each of three grade levels measured
- \* Physical activity had beneficial consequences for academic progress in both low- and high-performing schools

***Data please!***

North Carolina Study: Examined effects of a classroom-based PA program.

Results:

- \* PA can be added without hurting student academic scores
- \* Adding time to academic subjects by taking time from PE does not improve grades in these subjects
- \* Levels of arousal and attention in the classroom were better
- \* Overall academic grades improved for all grade levels
- \* 6th grade standardized tests showed improvements in math and overall intelligence scores despite the 13-14% reduction in classroom studies

***Data please!***

SPARK Study: Examined effects of 2-year PE program in elementary students.

Results:

- \* 3-year changes in percentile rank with 8 comparisons on standardized MAT tests: 4 groups scored better, 1 worse, and 3 had no difference
- \* Increasing PE from 32 to 98 or 109 minutes per week ***did not*** reduce academic performance

So, let's build some better brain cells!

***Session Activity Line Up***

Source: SPARKfamily.org – Fitness Lab Aerobic Games

- \* Fat Transfer
- \* TAG Team
- \* Poker Sprints
- \* Decoder



## SPARKfit Aerobic Games

# Fat Transfer

### Prep

- 4 hoops (representing the blood vessels)
- 1 beanbag per student (representing High-Density Lipoprotein – HDL)
- 1 larger ball per student (representing Low-Density Lipoprotein – LDL)

### Set

- Create a large (30X30 paces) activity area with a hoop in each corner.
- Create 4 equal groups of students; 1 per hoop.
- Place 1 beanbag and 1 large ball into each hoop for each student in the group.

### Teach!

1. The object of *Fat Transfer* is to remove all the LDLs (large balls) from your blood vessel (hoop) and fill it with HDLs (beanbags).
2. On signal, take one of your LDLs and jog to another group's hoop. Leave your LDL there and take an HDL back to your blood vessel (hoop).
3. Repeat at other groups' hoops until the stop signal.
4. **RULES:**
  - You may only take 1 item at a time.
  - When placing an HDL in your hoop, you must have 1 foot in the hoop (*to prevent throwing beanbags*).
  - No one can stay back to “defend” their team's hoop.
5. **CHALLENGES:**
  - How many other hoops can you visit before the signal?
6. **WRAP IT UP:**
  - What were some of the strategies used today?
  - Who can tell me one way we improved our health and fitness levels today? How about another one?

### Standards Addressed:

- Aerobic Capacity
- Regular Physical Activity
- Social Responsibility, Cooperation

### Notes:

---

---



## SPARKfit Aerobic Games

# Decoder

### Prep

- 10 cones
- 6 *Decoder Code Keys* (SPARKfamily.org)
- 1 *Decoder Game Sheet* per 2 students (SPARKfamily.org)
- 1 pencil per 2 students
- Tape

### Set

- Place 4 cones, 4 paces apart to create starting line.
- Post each *Decoder Game Key* at a different location around the activity area.
- Place a cone 5' to the left of each key.
- Create pairs, each pair with 1 *Decoder Game Sheet* and a pencil.

### Teach!

1. The object of *Decoder* is to decode the game quote. Do this by running to a *Decoder Game Key*, then return to your partner remembering the information on the key in order to record it on your *Game Sheet*.
2. **RULES:**
  - Pairs take turns running to the *Decoder Game Keys* for clues.
  - Running partner gives a high-5 to partner behind line sending partner for another clue.
  - Be sure to use the correct *Key #* for each game quote.
  - Keep clues a secret with your partner – no sharing or stealing.
  - All letters must be written legibly.
  - Carry nothing with you when running.
3. **WRAP IT UP:**
  - Why was cooperation important in this activity?
  - Who can tell me one way we improved our health and fitness levels today?

### Standards Addressed:

- Aerobic Capacity
- Social Responsibility, Cooperation

### Notes:

---



# SPARKfit Decoder Game Sheet

## KEY #1

A	B	C	D	E	F	G	H	I	J	K	L	M
1	18	20	14	8	3	4	19	2	22	26	17	11
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
6	16	13	5	9	21	23	12	7	25	24	15	10

## Key #2

A	B	C	D	E	F	G	H	I	J	K	L	M
8	6	16	20	2	13	19	26	10	15	18	7	21
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
24	11	23	17	14	22	25	4	12	9	3	5	1

## Key #3

A	B	C	D	E	F	G	H	I	J	K	L	M
1	17	12	8	18	24	13	2	19	16	6	20	9
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
3	15	23	25	10	4	21	26	7	14	22	11	5

# **SPARKfit Decoder Quotes Key**

## **Game #1**

**Discipline is not a nasty word.**

## **Game #2**

**Success is the best builder of character.**

## **Game #3**

**Ninety eight percent of success is in the head and the heart.**