Chapter 22

Fitness Education for Grades 3

Through 5

# Summary

Developmental physical education emphasizes the acquisition of fundamental and specialized movement skills that provide children with the movement repertoire to engage in a physically active lifestyle. By the time children enter grades 3 to 5, they have the physical capacity to acquire specialized movement skills specific to the components of physical fitness. This chapter focuses on understanding and implementing national standard 3 for K-12 physical education in the developmental physical education curriculum: “The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness” (SHAPE America, 2014, p.12). This standard is aimed at establishing patterns of regular participation in physical activity and acquiring the knowledge and skills to achieve and maintain physical fitness. Thus it serves a dual purpose: being physically active every day and becoming physically fit. In that context, this chapter details fitness guidelines and best practices, current fitness education programs, and standards-based fitness learning experiences.

# Key Objectives

* Describing developmentally appropriate applications of the FITT guidelines and principles of exercise for children in grades 3 through 5
* Describing best practices in fitness education
* Selecting and using fitness assessments to teach and plan for developmentally appropriate fitness education
* Identifying fitness education programs for youth in grades 3 through 5 that meet SHAPE America guidelines and national mandates for comprehensive school wellness
* Identifying technology for enhancing physical activity and fitness among children in grades 3 through 5
* Selecting fitness education learning experiences that meet national standards for K-12 physical education

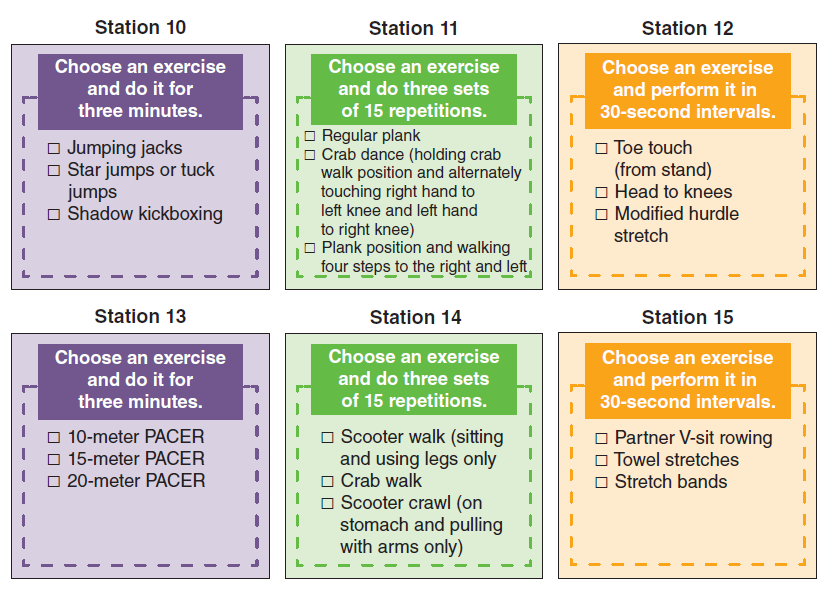
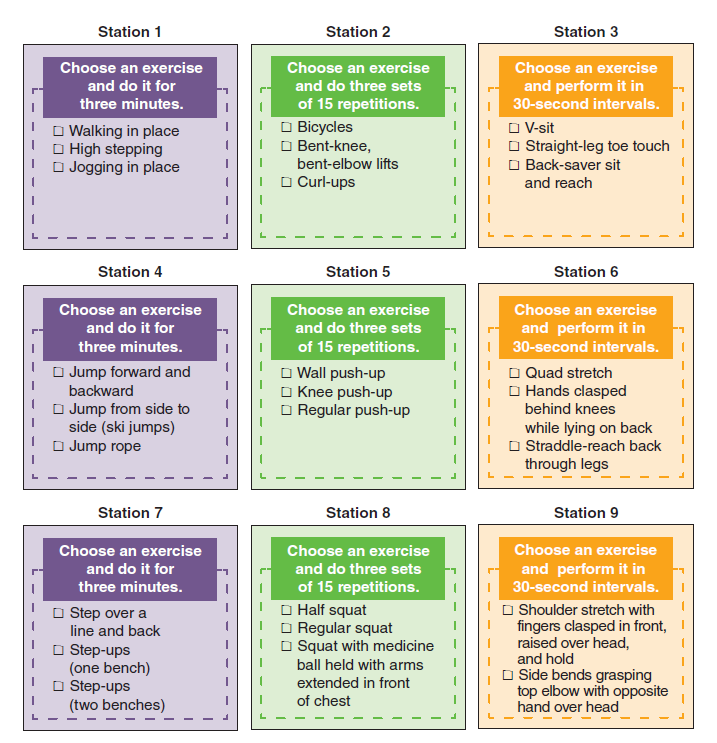
# Big Ideas

* Children’s fitness is best developed by being physically active, both at home and during school hours. Teachers need to help children understand that the biggest changes in fitness are achieved through regular physical activity; they must also teach the specific fitness benefits of regular physical activity.
* Best practice for teaching the components of health-related fitness to intermediate-grade children involves teaching them to self-assess and self-monitor the FITT of their physical activity—that is, the frequency, intensity, time, and type.
* The best use of fitness testing results is for developing a personalized plan; test result should not be used for grading purposes.
* Children and their parents need to fully understand both the FITT guidelines and the exercise principles (overload, progression, specificity, regularity, uniqueness, and reversibility). They also need to understand how adherence to the guidelines and principles affects the child’s overall health and well-being.
* The FITT guidelines should be applied as follows: Frequency (F) is determined in number of days per week and should be daily. Intensity (I) refers to how hard one exercises and should be moderate to vigorous, with at least one-quarter of the child’s daily 60 minutes (time, or T) being at the vigorous level. The type (T) of activity should be varied and should be determined by the interests and abilities of the child. It should also should include both aerobic and flexibility activities on a daily basis and muscular strength and muscular endurance activities addressing each body area at least every other day.
* Children’s beliefs about the importance of physical activity are strongly influenced by getting parents and other caregivers involved in their physical activity assessments, monitoring efforts, and activity choices.
* Before grade 5 or so, physical activity intensity is best assessed by using children’s own ratings and feelings about how hard they are working (e.g., breathing rate, children’s OMNI scale). At about grade 4 or grade 5, teachers can begin introducing children to heart rate monitoring for assessing their activity intensity.
* Many user-friendly, state-of-the-art fitness education programs are available for working with children in grades 3 through 5 in ways that meet national guidelines and national mandates for comprehensive school wellness. Teachers should help children explore the programs and teach them ways to monitor their physical activity and nutritional intake. Introducing children to healthy uses of technology and gaming can help motivate them to become and remain active.
* Teachers are strongly encouraged to teach about fitness by using a variety of enjoyable movement activities, including dance, lead-up games, team sports, and individual and lifetime activities. Fitness education should be integrated into each day—not taught as a separate unit—and teaching children to monitor FITT and fitness development should be part of every physical education class and activity. To accomplish this goal, teachers merely need to regularly stop activities and then ask children questions about how each activity contributes to their personal fitness.

# Part 1: FITT Guidelines

**Scenario:** Students engage in the following station activities to experience using the FITT guidelines (see figure 22.13 below and pages 547-549 in the book). The learning goal is for students to select a challenging intensity, identify the type of activity (i.e., aerobic, muscular endurance, or flexibility), and answer reflection questions after performing all stations. Students perform each station to moderate-tempo music, prerecorded to provide three minutes of activity followed by a 30-second interval and then another three minutes of movement.

**Teacher candidate task:** Answer the reflection questions provided after the sample station activities.

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**Reflection**

1. What type of exercise is performed at the *purple* stations?
2. What type of exercise is performed at the *green* stations?
3. What type of exercise is performed at the *gold* stations?
4. Which FITT guideline is varied by the choices provided at each station?
5. If you do this workout two times during one week and three times during the next week, which guideline are you varying?
6. If you perform each exercise for 30 seconds for 3 sets during the first week, perform each exercise for 45 seconds for 3 sets during the second week, and each exercise for60 seconds for 3 sets during the third week, which FITT guideline are you varying?

# Part 2: Exercise Principles

Review the exercise principles described in the table below. Then review the following sample scenarios and activities and determine which exercise principle is described in each.

|  |  |
| --- | --- |
| Principle of uniqueness (individuality) | Each individual is special, unique, and will respond to training at different rates and with different results. (Individual differences theory.) |
| Principle of overload | In order to promote change in a positive direction the system must be worked beyond what is normal (overloaded).  Adding 2 minutes per day to a walking session.  Adding 2.5 pounds to the barbell lifted.  Reaching half an inch further during the sit and reach test. |
| Principle of progression | Overload must be increased in a gradual schedule to be safe and effective. |
| Principle of specificity | Changes in any body system or segment will occur only if that specific area of the body is targeted or overloaded. (Doing arm curls will not increase strength in the legs. Flexibility (range of motion) in the right hip may differ from that of the left hip.)  \*Note: principle of specificity does not apply to fat reduction. |
| Principle of regularity | Physical activity must occur daily or regularly, or strength, endurance, and flexibility will be lost or reduced, or injury may occur. (Use it or lose it!) |
| Principle of reversibility | The opposite of progression, this principle states that gains previously achieved through training will be lost through inactivity. (Often combined with principle of regularity.) |

**Activity 1:** Children perform three sets of 15 repetitions of the curl-up to strengthen their abdominal muscles. Exercise principle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Activity 2:** Children participate in an instant activity on the first day of physical education class in a given week for three minutes. On the second day of physical education (in the same week), they participate in the same instant activity, this time for five minutes. Exercise principle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Scenario 1:** John rides his bike for 30 minutes twice per week for six weeks. Then his family goes on vacation and he does not ride his bike during the next two weeks. Exercise principle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Scenario 2:** Shane plans to do a major bike ride with his family at the end of the summer. To prepare, he plans to increase his road mileage incrementally each week. Exercise principle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Scenario 3:** After following the same aerobic workout plan for four weeks, Sue and Dakota each run a mile. Sue runs the mile faster than Dakota does. Exercise principle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Part 3: Designing Fitness Activities

Design a fitness activity with the learning goal of having children focus on intensity by assessing their rating of perceived of exertion. Consider the following best practices for designing a fitness activity (see chapter 22 for sample instructional activities):

* Relevant age-appropriate tasks
* Use of music
* Use of equipment to augment activity
* Choices
* Opportunity to assess rating of perceived exertion (RPE) using the OMNI scale

**OMNI RPE Verbal Descriptors for Children**

0 = not tired at all

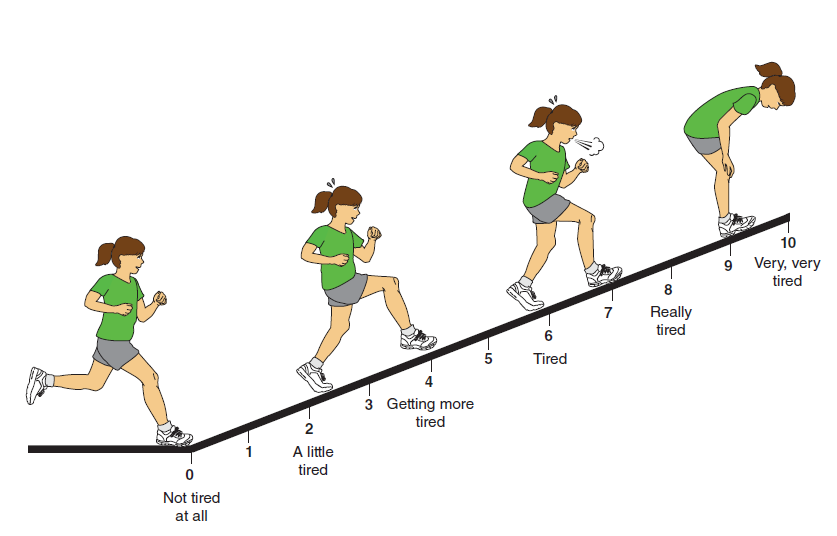
1 or 2 = a little tired

3 or 4 = getting more tired

5 or 6 = tired

7 or 8 = really tired

9 or 10 = very, very tired.

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**Learning goal:** assessing intensity by using the OMNI RPE scale (figure 22.6 above)

**Activity description:**

**Environment:**

**Practice:** constant

**Closed-skill cues:**

**Assessment:** Design a self-check task card using the OMNI RPE scale. Review the criteria for the components of a self-check task card in chapter 10.

# Part 4: Best Practices in Fitness Education

Describe to your students’ parents what you are doing to prepare the students for performing the Fitnessgram assessment.

# Review Questions

1. What are the FITT guidelines? Describe one developmentally appropriate consideration for implementing these guidelines with children in grades 3 through 5.
2. What are the principles of exercise?
3. Describe four best practices in fitness education specific to children in grades 3 through 5.
4. How should a physical education teacher prepare children for fitness assessment?
5. What are the components of Fitnessgram?
6. What is the Activitygram portion of Fitnessgram?
7. What are the classification zones for reporting children’s fitness results?
8. Describe two fitness education programs.
9. What types of technology are useful for enhancing children’s fitness assessment?