



Goldenrod Research Corporation
204 W Saint Joseph Street
PO Box 306
Spalding NE 68665

YouthTouch for After School Programs for Grades 3-8

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YouthTouch for After School Grade 3 STANDARD COMPLETE PACKAGE

Equipment Component:

1. Content: The Grade 3 Standard Complete Package provides **RoboACs** as the robotic equipment. RoboAC is a joystick controlled 5-axis robot, and each unit includes a pair of joysticks with cables, end of arm tooling and a power supply. No computer is needed to operate RoboAC.

2 Amount: One RoboAC is provided for every 2 students in the class. For example: A 3rd grade YouthTouch for After School package for 12 students would provide 6 RoboACs, as well as accessories and instructional materials for 12. (For an odd number of students, generally round up, to the next even number.)

Curriculum Component: Grade 3 Standard Curriculum

1. Suitability: The grade 3 standard curriculum provided is suitable for 3rd grade students or for older students who are currently performing at the 3rd grade level. *It is not recommended for high performing younger students due to the motor skills and muscle coordination required.*

2. Organization: The grade 3 standard curriculum covers twenty (20) hours of learning time. There are twenty (20) periods or “days” of activities of 1-hour duration each. Each hour is divided into two (2) thirty-minute sessions. Approximately twenty-five (25) minutes of each session are instructional time with five (5) minutes allowed for organization. One of each of the two (2) half -hour sessions consists of activities involving the RoboACs, while those in the other session do not require hands-on use of equipment by students. This system

permits one half of the members of the class to engage in activities using the RoboACs, while the other half of the class is simultaneously doing lessons which involve reading, writing, drawing or computation, rather than hands-on use of the RoboACs.

Each day, both sets of lessons address the same topics. For the second session of each period, the students switch positions, so that all students engage in hands-on activities during each class period. This rotating system permits twice the number of students to be served in each class with the same number of robots, and classroom management is simplified for the teacher.

3. Educational Content: The grade 3 standard curriculum addresses the content areas of math, science, social studies and language arts. It includes lessons on point of origin, lines, angles, modeling, estimating, adding and subtracting, robots, circles and others. The educational objectives aligned with these topics are to be accomplished through student activities that include reading, writing, physical activity, art, vocabulary building, computation, and mathematical reasoning exercises, as well as hands-on activities using the equipment. Activities are mapped to state curriculum standards.

4. Instructional Materials: The curriculum package contains a manual to guide the teacher through each activity of the 20 periods with a lesson plan provided for each day. It contains student consumables sufficient for the number of students indicated and a CD so that extras may be reproduced, if needed. It also contains the accessories package, which complements the grade 3 standard curriculum containing the small manipulatives, additional tools and other materials needed for the number of students indicated to accomplish all the activities specified in this curriculum. The school/teacher is not expected to provide or construct any special learning aids. Pens, pencils, crayons and blank or "loose leaf" paper should be made available to students and are not included in the typical accessories package.

YouthTouch for After School Grade 4 STANDARD COMPLETE PACKAGE

Equipment Component:

1. Content: The Grade 4 Standard Complete Package provides **RoboACs** as the robotic equipment. RoboAC is a joystick controlled 5-axis robot, and each unit includes a pair of joysticks with cables, end of arm tooling and a power supply. No computer is needed to operate RoboAC.

2. Amount: One RoboAC is provided for every 2 students in the class. For example: A 4th grade YouthTouch for After School package for 12 students would provide 6 RoboACs, as well as accessories and instructional materials for 12. (For an odd number of students, generally round up, to the next even number.)

Curriculum Component: Grade 4 Standard Curriculum

1. Suitability: The Grade 4 Standard curriculum provided is suitable for 4th grade students or for older students who are currently performing at the 4th grade level. *It is not recommended for high performing students younger than age 8/9 due to the motor skills and muscle coordination required.*

2. Organization: The Grade 4 Standard curriculum is designed to cover twenty (20) hours of learning time in twenty (20) periods or "days" of activities of 1-hour duration each. However, twenty-three (23) hours of activities are provided. The teacher is asked to administer a provided pretest on the first day to assess the students' skill base. If prerequisite skills need to be acquired first, all students will begin with lesson one (1) and proceed to lesson twenty (20) in order to preserve the proper sequence. If students are found already to possess the prerequisite skills, the class will begin with a special "quick review" lesson three and then proceed with lessons four through twenty-three.

Each hour is divided into two (2) thirty-minute (30 min.) sessions. Approximately twenty-five (25) minutes of each session are instructional time with five (5) minutes allowed for organization. One of each of the two (2) half-hour sessions consists of activities involving the RoboACs, while those in the other session do not require hands-on use of equipment by students. This system permits one half of the members of the class to engage in activities using the RoboACs, while the other half of the class is simultaneously doing lessons which involve reading, writing, drawing or computation, rather than hands-on use of the RoboACs.

Each day, both sets of lessons address the same topics. For the second session of each period, the students switch positions, so that all students engage in hands-on activities during each class period. This rotating system permits twice the number of students to be served in each class with the same number of robots, and classroom management is simplified for the teacher.

3. Educational Content: The Grade 4 standard curriculum addresses the content areas of math, science, social studies and language arts. It includes lessons on point of origin, coordinates, arcs, angles, problem solving, fractions, measurement, automation, robots, and others. The educational objectives aligned with these topics are to be accomplished through student activities that include reading, writing, physical activity, art, vocabulary building, computation, and mathematical reasoning exercises, as well as hands-on activities using the equipment. Activities are mapped to state curriculum standards.

4. Instructional Materials: The curriculum package contains a manual to guide the teacher through each activity: one through twenty or three through twenty-three (1-20 or 3-23), with a lesson plan provided for each day of their track. The package contains student consumables sufficient for the number of students indicated and a CD so that extras may be reproduced, if needed. It also contains the accessories package which complements the Grade 4 Standard Curriculum providing the small manipulatives, additional tools and other materials needed for the number of students indicated to carry-out all of the activities specified in this curriculum. The school/teacher is not expected to provide or construct any special learning aids. Pens, pencils, crayon, and blank or "loose leaf" paper should be made available to students and are not included in the typical accessories package.

YouthTouch for After School Grade 4 DELUXE COMPLETE PACKAGE

Equipment Component:

1. Content: The Grade 4 deluxe complete package provides **RoboAC and Tempest** as the robotic equipment. RoboAC is a joystick controlled 5-axis robot, and each unit includes a pair of joysticks with cables, end of arm tooling and a power supply. No computer is needed to operate RoboAC. Tempest is a game table on which balls are suspended over columns of air, and a pair of RoboACs manipulates them. No desktop computer is needed to operate Tempest

2. Amount: One RoboAC is provided for every two students in the class. (For an odd number of students, generally round up, to the next even number.) One Tempest with an additional pair of RoboACs is provided for every 12 students in the class. For example, a 4th grade For example: a 4th grade YouthTouch for After School package for 12 students would provide 6 RoboACs, and one Tempest with an additional pair of RoboACs, as well as accessories and instructional materials for 12. The same package for 13 to 24 students would include one RoboAC for every 2 students and a second Tempest fitted with a pair of additional robots.

Curriculum Component: Grade 4 Deluxe Curriculum

1. Suitability: The Grade 4 deluxe curriculum is suitable for 4th grade students or for older students who are currently performing at the 4th grade level. *It is not recommended for high performing students younger than age 9/10 due to the motor skills and muscle coordination required.*

2. Organization: The Grade 4 deluxe curriculum is designed to cover twenty (20) hours of learning time in twenty (20) periods or "days" of activities of 1-hour duration each. However, twenty-three (23) hours of activities are provided. The teacher is asked to administer a provided pretest on the first day to assess the students' skill base. If prerequisite skills need to be acquired first, all students will begin with lesson 1 and proceed to lesson 20 in order to preserve the proper sequence. If students are found already to possess the prerequisite skills, the class will begin with a special "quick review" lesson three as their starting point, and then proceed with lessons four through twenty-three.

Each hour is divided into two (2) thirty-minute sessions. Approximately twenty-five (25) minutes of each session are instructional time with five (5) minutes allowed for organization. One of each of the two (2) half -hour sessions consists of activities involving RoboACs or Tempest, while those in the other session do not require hands-on use of equipment by students. This system permits one half of the members of the class to engage in

activities using the robotic equipment, while the other half of the class is simultaneously doing lessons which involve reading, writing, drawing or computation, rather than hands-on learning activities.

Each day, both sets of lessons address the same topics. For the second session of each period, the students switch positions, so that all students engage in hands-on activities during each class period. This rotating system permits twice the number of students to be served in each class with the same number of robots, and classroom management is simplified for the teacher

3. Educational Content: The Grade 4 deluxe curriculum addresses the content areas of math, science, social studies and language arts. It includes lessons on point of origin, coordinates, arcs, angles, problem solving, fractions, measurement, automation, robots, and others. The educational objectives aligned with these topics are to be accomplished through student activities that include reading, writing, physical activity, art, vocabulary building, computation, and mathematical reasoning exercises, as well as hands-on activities using the equipment. Activities are mapped to state curriculum standards.

4. Instructional Materials: The curriculum package contains a manual to guide the teacher through each activity: one through twenty or three through twenty-three (1-20 or 3-23), with a lesson plan provided for each day of their track. The package contains student consumables sufficient for the number of students indicated and a CD so that extras may be reproduced, if needed. It also contains the accessories for the Grade 4 deluxe curriculum providing the small manipulatives, additional tools and other materials needed for the number of students indicated to carry out all of the activities specified in this curriculum. The school/teacher is not expected to provide or construct any special learning aids. Pens, pencils, crayons and blank or "loose leaf" paper should be made available to students and are not included in the typical accessories package.

YouthTouch for After School Grade 5 STANDARD OPTION

Equipment Component:

1. Content: The Grade 5 Standard Option provides **RoboArms** as the robotic equipment. RoboArm is an intelligent, programmable 5-axis robot, and each unit includes necessary cables, end of arm tooling and a power supply. A computer is needed to operate RoboArm, which may be Mac or Windows format. (Windows 3.2 or higher and any Mac).

2. Amount: One RoboArm is provided for every two students in the class. (For an odd number of students, generally round up, to the next even number.) For example, a 5th grade YouthTouch for After School package for 12 students would provide 6 RoboArms as well as accessories and instructional materials for 12.

Curriculum Component: Grade 5 Standard Curriculum

1. Suitability: The Grade 5 standard curriculum is suitable for 5th grade students or for older students who are currently performing at the 5th grade level.

2. Organization: The Grade 5 standard curriculum is designed to cover twenty (20) hours of learning time in twenty (20) periods or "days" of activities of 1-hour duration each. However, twenty-three (23) hours of activities are provided. The teacher is asked to administer a provided pretest on the first day to assess the students' skill base. If prerequisite skills need to be acquired first, all students will begin with lesson one (1) and proceed to lesson twenty (20) in order to preserve the proper sequence. If students are found already to possess the prerequisite skills, the class will begin with a special "quick review" lesson three (3) as their starting point, and then proceed with lessons four through twenty-three (4-23).

Each hour is divided into two (2) thirty-minute sessions. Approximately twenty-five (25) minutes of each session are instructional time with five (5) minutes allowed for organization. One of each of the two (2) half -hour sessions consists of activities involving RoboACs or Tempest, while those in the other session do not require hands-on use of equipment by students. This system permits one half of the members of the class to engage in activities using the robotic equipment, while the other half of the class is simultaneously doing lessons which involve reading, writing, drawing or computation, rather than hands-on learning activities.

Each day, both sets of lessons address the same topics. For the second session of each period, the students switch positions, so that all students engage in hands-on activities during each class period. This

rotating system permits twice the number of students to be served in each class with the same number of robots, and classroom management is simplified for the teacher.

3. Educational Content: The Grade 5 standard curriculum addresses the content areas of math, science, social studies and language arts. It includes lessons on angles, programming, integers on the numberline, debugging, statistics, and others. The educational objectives aligned with these topics are to be accomplished through student activities that include reading, writing, physical activity, art, vocabulary building, computation, and mathematical reasoning exercises, as well as hands-on activities using the equipment. Activities are mapped to state curriculum standards.

4. Instructional Materials: The curriculum package contains a manual to guide the teacher through each activity: one through twenty or three through twenty-three (1-20 or 3-23), with a lesson plan provided for each day of their track. The package contains student consumables sufficient for the number of students indicated and a CD so that extras may be reproduced, if needed. It also contains the accessories package for the Grade 5 Standard Option which provides the small manipulatives, additional tools and other materials needed for the number of students indicated to carry out all of the activities specified in this curriculum. The school/teacher is not expected to provide or construct any special learning aids. Pens, pencils, crayons, and blank or "loose leaf" paper should be made available to students and are not included in the typical accessories package.

YouthTouch for After School Grade 5 DELUXE OPTION

Equipment Component:

1. Content: The Grade 5 Deluxe Option provides **RoboArms and Tempest** as the robotic equipment. RoboArm is an intelligent, programmable 5-axis robot, and each unit includes necessary cables, end of arm tooling and a power supply. A computer is needed to operate RoboArm, which may be Mac or Windows platform (Windows 3.2 or higher and any Mac). Tempest is a game table on which balls are suspended over columns of air, and a pair of RoboACs manipulates them. No desktop computer is needed to operate Tempest.

2. Amount: One RoboArm is provided for every two students in the class. (For an odd number of students, generally round up, to the next even number.) One Tempest with an additional pair of RoboACs is provided for every 12 students in the class. For example: a 5th grade YouthTouch for After School package for 12 students would provide 6 RoboArms, and one Tempest with a pair of RoboACs, as well as accessories and instructional materials for 12. The same package for 13 to 24 students would include one RoboArm for every 2 students and a second Tempest fitted with a pair of additional robots.

Curriculum Component: Grade 5 Deluxe Curriculum

1. Suitability: The grade 5 deluxe curriculum is suitable for 5th grade students or for older students who are currently performing at the 5th grade level. *It is not recommended for high performing students younger than age 9/10, due to the motor skills and muscle coordination required to operate Tempest.*

2. Organization: The grade 5 deluxe curriculum is designed to cover twenty (20) hours of learning time in twenty (20) periods or "days" of activities of 1-hour duration each. However, twenty-three (23) hours of activities are provided. The teacher is asked to administer a provided pretest on the first day to assess the students' skill base. If prerequisite skills need to be acquired first, all students will begin with lesson one (1) and proceed through lesson twenty (20), in order to preserve the proper sequence. If students are found already to possess the prerequisite skills, the class will begin with a special "quick review" lesson three (3), as their starting point, and then proceed with lessons four through twenty-three (4-23).

Each hour is divided into two (2) thirty-minute (30 min.) sessions. Approximately twenty-five (25) minutes of each session are instructional time with five (5) minutes allowed for organization. One of each of the two (2) half-hour sessions consists of activities involving RoboACs or Tempest, while those in the other session do not require hands-on use of equipment by students. This system permits one half of the members of the class to engage in activities using the robotic equipment, while the other half of the class is simultaneously doing lessons which involve reading, writing, drawing or computation, rather than hands-on learning activities.

Each day, both sets of lessons address the same topics. For the second session of each period, the students switch positions, so that all students engage in hands-on activities during each class period. This rotating system permits twice the number of students to be served in each class with the same number of robots, and classroom management is simplified for the teacher.

3. Educational Content: The grade 5 deluxe curriculum addresses the content areas of math, science, social studies and language arts. It includes lessons on angles, programming, integers on the numberline, debugging, statistics, and others. The educational objectives aligned with these topics are to be accomplished through student activities that include reading, writing, physical activity, art, vocabulary building, computation, and mathematical reasoning exercises, as well as hands-on activities using the equipment. Activities are mapped to state curriculum standards.

4. Instructional Materials: The curriculum package contains a manual to guide the teacher through each activity: one through twenty or three through twenty-three (1-20 or 3-23), with a lesson plan provided for each day of their track. The package contains student consumables sufficient for the number of students indicated and a CD so that extras may be reproduced, if needed. It also contains the accessories package for the grade 5 deluxe option which provides the small manipulatives, additional tools and other materials needed for the number of students indicated to carry out all of the activities specified in this curriculum. The school/teacher is not expected to provide or construct any special learning aids. Pens, pencils, crayons, and blank or "loose leaf" paper should be made available to students and are not included in the typical accessories package.

YouthTouch for After School Grade 6 COMPLETE PACKAGE

Equipment Component:

1. Content: The Grade 6 Complete Package provides **RoboArms and HydraLifts** as the robotic and fluid power equipment, respectively. RoboArm is an intelligent, programmable 5-axis robot, and each unit includes necessary cables, end of arm tooling and a power supply. A computer is needed to operate RoboArm, which may be Mac or Windows format. (Windows 3.2 or higher and any Mac). HydraLift simulates an air over oil hydraulic lift, as used in gas stations. No computer is needed to operate HydraLift.

2. Amount: One RoboArm and one HydraLift are provided for every two (2) students in the class. (For an odd number of students, generally round up, to the next even number.) For example, a 6th grade YouthTouch for After School package for twelve (12) students would provide six (6) RoboArms and six (6) HydraLifts, as well as accessories and instructional materials for twelve (12).

Curriculum Component: Grade 6 Curriculum

1. Suitability: The grade 6 curriculum is suitable for 6th grade students or for older students who are currently performing at the 6th grade level.

2. Organization: The grade 6 curriculum is designed to cover twenty (20) hours of learning time in twenty (20) periods or "days" of activities of 1-hour duration each. However, twenty-three (23) hours of activities are provided. The teacher is asked to administer a provided pretest on the first day to assess the students' skill base. If prerequisite skills need to be acquired first, all students will begin with lesson one (1) and proceed to lesson twenty (20) in order to preserve the proper sequence. If students are found already to possess the prerequisite skills, the class will begin with a special "quick review" lesson three (3) as their starting point, and then proceed with lessons four through twenty-three (4-23).

Each hour is divided into two (2) thirty-minute sessions. Approximately twenty-five (25) minutes of each session are instructional time with five (5) minutes allowed for organization. One of each of the two (2) half-hour sessions consists of activities involving RoboACs or Tempest, while those in the other session do not require hands-on use of equipment by students. This system permits one half of the members of the class to engage in activities using the robotic equipment, while the other half of the class is simultaneously doing lessons which involve reading, writing, drawing or computation, rather than hands-on learning activities.

Each day, both sets of lessons address the same topics. For the second session of each period, the students

switch positions, so that all students engage in hands-on activities during each class period. This rotating system permits twice the number of students to be served in each class with the same number of robots, and classroom management is simplified for the teacher.

3. Educational Content: The grade 6 standard curriculum addresses the content areas of math, science, social studies and language arts. It includes lessons on programming, debugging, integers on the numberline, adding algebraically, measurement, friction, work, molecules, estimating, graphing and others. It includes lessons on point of origin, lines, angles, modeling, estimating, adding and subtracting, robots, circles and others. The educational objectives aligned with these topics are to be accomplished through student activities that include reading, writing, physical activity, art, vocabulary building, computation, and mathematical reasoning exercises, as well as hands-on activities using the equipment. Activities are mapped to state curriculum standards.

4. Instructional Materials: The curriculum package contains a manual to guide the teacher through each activity: one through twenty or three through twenty-three (1-20 or 3-23), with a lesson plan provided for each day of their track. The package contains student consumables sufficient for the number of students indicated and a CD so that extras may be reproduced, if needed. It also contains the accessories package for the grade 6 curriculum which provides the small manipulatives, additional tools and other materials needed for the number of students indicated to carry out all of the activities specified in this curriculum. The school/teacher is not expected to provide or construct any special learning aids. Pens, pencils, crayons, and blank or "loose leaf" paper should be made available to students and are not included in the typical accessories package.

YouthTouch for After School Grade 7 COMPLETE PACKAGE

Equipment Component:

1. Content: The Grade 7 Complete Package provides **RoboArms and RoboVues** as the robotic equipment. RoboArm is an intelligent, programmable 5-axis robot, and each unit includes necessary cables, end of arm tooling and a power supply. A computer is needed to operate RoboArm, which may be Mac or Windows format. (Windows 3.2 or higher and any Mac). RoboVue is an infrared-sensitive closed circuit TV camera, which mounts atop RoboArm, and each unit comes complete with cabling, mounting attachments and power supply.

2. Quantity: One (1) RoboArm and one (1) RoboVue are provided for every two (2) students in the class. (For an odd number of students, generally round up, to the next even number.) For example, a 7th grade YouthTouch for After School package for twelve (12) students would provide six (6) RoboArms and six (6) RoboVues, as well as accessories and instructional materials for twelve (12).

Curriculum Component: Grade 7 Curriculum

1. Suitability: The grade 7 curriculum is suitable for 7th grade students or for older students who are currently performing at the 7th grade level.

2. Organization: The grade 7 curriculum is designed to cover twenty (20) hours of learning time in twenty (20) periods or "days" of activities of 1-hour duration each. However, twenty-three (23) hours of activities are provided. The teacher is asked to administer a provided pretest on the first day to assess the students' skill base. If prerequisite skills need to be acquired first, all students will begin with lesson one (1) and proceed to lesson twenty (20) in order to preserve the proper sequence. If students are found already to possess the prerequisite skills, the class will begin with a special "quick review" lesson three (3) as their starting point, and then proceed with lessons four through twenty-three (4-23).

Each hour is divided into two (2) thirty-minute sessions. Approximately twenty-five (25) minutes of each session are instructional time with five (5) minutes allowed for organization. One of each of the two (2) half -hour sessions consists of activities involving RoboACs or Tempest, while those in the other session do not require hands-on use of equipment by students. This system permits one half of the members of the class to engage in activities using the robotic equipment, while the other half of the class is simultaneously doing lessons which involve reading, writing, drawing or computation, rather than hands-on learning activities.

Each day, both sets of lessons address the same topics. For the second session of each period, the students switch positions, so that all students engage in hands-on activities during each class period. This rotating system

permits twice the number of students to be served in each class with the same number of robots, and classroom management is simplified for the teacher.

3. Educational Content: The Grade 7 curriculum addresses the content areas of math, science, social studies and language arts. It includes lessons on absolute value, scientific notation, ratios, problem solving, base 2 numbers, programming, adding algebraically and solving for an unknown. The educational objectives aligned with these topics are to be accomplished through student activities that include reading, writing, physical activity, art, vocabulary building, computation, and mathematical reasoning exercises, as well as hands-on activities using the equipment. Activities are mapped to state curriculum standards.

4. Instructional Materials: The curriculum package contains a manual to guide the teacher through each activity: one through twenty or three through twenty-three (1-20 or 3-23), with a lesson plan provided for each day of their track. The package contains student consumables sufficient for the number of students indicated and a CD so that extras may be reproduced, if needed. It also contains the accessories package for the grade 7 curriculum, which provides the small manipulatives, additional tools and other materials needed for the number of students indicated to carry out all of the activities specified in this curriculum. The school/teacher is not expected to provide or construct any special learning aids. Pens, pencils, crayons, and blank or "loose leaf" paper should be made available to students and are not included in the typical accessories package.

YouthTouch for After School Grade 8 COMPLETE PACKAGE

Equipment Component:

1. Content: The Grade 8 YouthTouch for After School Complete Package provides **RoboArms and RoboVues** as the robotic equipment. RoboArm is an intelligent, programmable 5-axis robot, and each unit includes necessary cables, end of arm tooling and a power supply. A computer is needed to operate RoboArm, which may be Mac or Windows format. (Windows 3.2 or higher and any Mac).

2. Quantity: One (1) RoboArm is provided for every two (2) students in the class. (For an odd number of students, generally round up, to the next even number.) For example, an 8th grade YouthTouch for After School package for twelve (12) students would provide six (6) RoboArms.

Curriculum Component: Grade 8 Curriculum

1. Suitability: The grade 8 curriculum is suitable for 8th grade students or for older students who are currently performing at the 8th grade level.

2. Organization: The grade 8 curriculum is designed to cover twenty (20) hours of learning time in twenty (20) periods or "days" of activities of 1-hour duration each. However, twenty-two (22) hours of activities are provided. The teacher is asked to administer a provided pretest on the first day to assess the students' skill base. If prerequisite skills need to be acquired first, all students will begin with lesson one (1) and proceed to lesson twenty (20) in order to preserve the proper sequence. If students are found already to possess the prerequisite skills, the class will begin with a special "quick review" lesson two (2) as their starting point, and then proceed with regular lessons three through twenty-two (3-22).

Each hour for the 8th grade curriculum is approximately 45 minutes long. Approximately fifteen minutes is allowed daily for organization and teacher direction time. The students are divided into teams for the 8th grade curriculum, which is project based. The RoboArms are divided among the teams.

Approximately half of the total 20 periods will be spent in hands-on activities involving RoboArm, and one half will be spent on related language arts, and mathematics activities. The students will move back and forth as needed between the RoboArms and other activities. This system permits the entire class to engage in the same problem-solving scenario while the teacher serves as a resource and facilitator and classroom management is simplified for the teacher.

3. Educational Content: The Grade 8 curriculum consists of an environmental disaster scenario. Students working in teams will analyze a complex problem, devise solutions and attempt to communicate their ideas

effectively in order to persuade the community to support their plans. The curriculum addresses the content areas of math, science, social studies and language arts. Addressing the problem presented in the scenario will require an application of reading, listening, writing, speaking, critical thinking, calculating and mathematical reasoning skills. Student teams must draw upon and integrate knowledge from various disciplines to be successful and collaborate with team members in a cooperative effort. Activities to be undertaken in the course of the scenario are mapped to state curriculum standards.

4. Instructional Materials: The curriculum package contains a manual to guide the teacher through each activity: one through twenty or three through twenty-two (1-20 or 2-22), with a lesson plan provided for each day of their track. The package contains student consumables sufficient for the number of students indicated and a CD so that extras may be reproduced, if needed. It also contains the accessories package for the grade 8 Curriculum The accessories package for grade 8 is more involved than those for other grades and it contains small manipulatives, additional tools and other materials needed for the number of students indicated to create the scenario and carry out all the activities specified in this curriculum. The school/teacher is not expected to provide or construct any special learning aids. Pens, pencils, crayons, and blank or "loose leaf" paper should be made available to students and are not included in the typical accessories package. In addition, a table eight with a minimum dimensions of eight (8) feet long by thirty to thirty-six (30-36) inches wide (8ftx 2.5ft or 8ftx3ft) should be provided for each team, upon which to construct their environment.