<table>
<thead>
<tr>
<th>Science Standard</th>
<th>Key science content concepts</th>
<th>Best learning activities/curricula: how/what students will do</th>
<th>Best teaching methods: how/what students will do</th>
<th>Cross-curricular SOLs: identify SOLs and how curriculum is integrated</th>
<th>Vertical team objectives: how and what the team does to support the process</th>
<th>Resources: what resources the team has and what resources are needed</th>
<th>Timeframe: duration and sequence</th>
<th>Nature and form of assessment</th>
</tr>
</thead>
<tbody>
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Strand: Life Process K.7b, 1.4b, and 2.4b
The student will investigate and understand basic needs and life processes of plants and animals.

b) plants need nutrients, water, air, light, and a place to grow to survive.

- describe the life needs of plants. The life needs are nutrients, water, air, light, and a place that has adequate space for them to grow.
- describe some simple changes that plants undergo during their life cycles. This may include size, presence of leaves and branches, fruits, and seeds.

Discovering Education Videos:
- Germination and How Seeds Grow
- Create booklet, Growing A Flower Book
- Use handout, Sequence Seeds after using flipchart to sequence seeds (plantflipchart 1)
- Use gloves and seeds to germinate seeds
- Bookflix; fiction book, Planting a Rainbow and nonfiction book, It Could Be A Flower
- Read aloud: National Geographic Mag, Seeds Grow, Carrot Seed
- Growing Vegetable Soup

- K.6 and K.7 standards are related to Kinder Corner (Success For All) reading program unit 12 (Buggy About Spring) and unit 13 (City Gardens and Country Farms). Each unit is a two week program that immerses students in literature and activities around the theme.
- Math:
  - K.8 calendar (seasons)
  - K.10 compare objects by: height and length (taller, shorter, longer)
  - K.13 counting and tallying
  - K.14 graphing

- Prior to unit meet to gather materials and make plans
- Have: Discover Education Bookflix, Brain Pop Jr., Activboard flipcharts
- Kindergarten germinates the seeds
- First grade plants the germinated seeds
- Second grade completes life cycle and documents each step in the life cycle (second grade students come to kindergarten and first grade daily to take pictures of plant cycle)
- At end of unit kindergarten, first, and second grade will work together to create a bulletin board in school’s hall (see illustration)

- Read aloud books
- Second grade books
- Worksheets/booklets
- Digital camera
- Greenhouse

- Need:
  - Seeds
  - Gloves
  - Dirt
  - Cups

- 8 to 12 days for entire K.6 and K.7 standard
- Teacher observation
- County unit test
1.4b The student will investigate and understand that plants have basic life needs and functional parts and can be classified according to certain characteristics.

b) Basic parts of plants

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
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<tbody>
<tr>
<td>Create and Interpret</td>
<td>Create and interpret a model/drawing of a plant, including seeds, roots, stems, leaves, flowers, and fruits.</td>
</tr>
<tr>
<td>Discovering Education Videos: How Plants Grow</td>
<td>Use handout, Posy Parts (labeling plant parts)</td>
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<tr>
<td>Plant sprouted K seeds and label plant parts as they grow</td>
<td>Plant sprouted K seeds and label plant parts as they grow</td>
</tr>
<tr>
<td>Read aloud: Parts of Plant Experiment</td>
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<tr>
<td>Celery and blue water for stem</td>
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</tr>
<tr>
<td>Plants and baggie experiment</td>
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</tbody>
</table>

Read aloud of books on topic.

Discover Education Videos

Brain Pop Jr.

Flipcharts

Hands on project

Student discussion

Q and A time

Not able to relate to reading SOLs due to SFA reading program which is a 1st – 5th ability grouping program.

Math:

1.9 measure

1.11 calendar language

1.14 and 1.15 collect data and graphing

9 to 11 days for entire 1.4 standard

Teacher observation

County unit test
2.4b The student will investigate and understand that plants and animals undergo a series of orderly changes as they mature and grow.

**b) plant life cycles**

- Identify the stages in the life cycle of a flowering plant.
- Discover Education Videos: Plant Life Cycle and Pollination
- Read Aloud: Weslandia
- Daily digital photo of K and 1st grades seeds progression
- Continue watching plants grow to flowering and pollination stage and watch final stage of life cycle
- Use Azalea bush blooms to look at fertilization plant parts
- Graph growth on calendar to see complete life cycle

**Read aloud of books on topic.**
- Discover Education Videos
- Brain Pop Jr.
- Flipcharts
- Hands on project
- Student discussion
- Q and A time

**Not able to relate to reading SOLs due to SFA reading program which is a 1st – 5th ability grouping program.**

**Math:**
- 2.11 measuring length
- 2.13 calendar
- 2.17 and 2.19 graphing
- 2.18 predicting outcomes

| 10 to 15 days for entire 2.4 standard | Teacher observation | County unit test |