

Robyn Thiessen

## Perennial or Annual? 60 min

### Objective:

Students will become familiar with the similarities and differences between seeds and bulbs. They will also have an opportunity to learn first hand about gardening and planting.

### Big Idea:

Plants grow from a variety of sources. Not all plants come from seeds.

## 1. Warm Up / Anticipatory 10 min

Place daffodil bulbs(5) in a paper bag(one per bag) and have students use only their sense of touch to describe what is in the bag. Record describing words on a chart for later.

### Resources

- Pinterest board on bulb life cycles. <https://www.pinterest.ca/pin/15903404904215014/?lp=true>
- Life Cycle of a Daffodil. <https://youtu.be/ZBcw-xK5FEE>
- Time Lapse of Daffodil Growth [https://youtu.be/DXHGLDAj\\_Rw](https://youtu.be/DXHGLDAj_Rw)
- Planting Tulips and Daffodils [https://youtu.be/\\_IY98UmWCGo](https://youtu.be/_IY98UmWCGo)
- How to Plant Bulbs in the Spring or Fall. [https://youtu.be/RobJ\\_JbIN9k](https://youtu.be/RobJ_JbIN9k)
- Free Bulb Diagram TPT <https://www.teacherspayteachers.com/Product/Daffodil-Bulb-2207505http://>

## 2. Investigation and New Learning 20 min

Reveal the bulbs in the bag and have students share any prior knowledge that they have about bulbs and/or gardening.

Cut open the bulbs length wise and have students investigate, discuss and record what they observe. Connect to word chart created in warm up. Add any new words that connect to the learning.

## 3. Review & Check for Understanding 30 min

Have student draw and label the different parts of the bulb. Create a bulb life cycle drawing and explain what is happening at each stage. Use Wonder #235 as a referent.

Read through Wonder of Day #235 to add new knowledge and check for understanding of new vocabulary.

**Note:** You may want to see if a local nursery will donate bulbs to the class/school. Plant some bulbs in a school or class garden and wait for the promise to bloom in the spring.

Standards: K.LS.3. [3] SC4.1. K.RL.LCS.10.1. K.RL.P.4.1. K.RL.LCS.10.2. K.RI.P.4.1. 2.3.1.B. 2.3.2.B. 2.3.4.A. K.RI.MC.6.1. K.I.3.1. K.10 (D) 110.11 (F) 110.11 (C) 110.11 (B) K.10 (A) K.9 (B) K.10 (A) K.10 (C) 3.1. 5.1. LA 0.4.1.A. LA 0.1.6.M. K.LS.2. K.LS.1. K.RV.3.2. K.RV.1.1. K.E.3A.3. K.L.2A.6. K.RI.LCS.9.2. K.RI.LCS.11.2. K.C.MC.2.1. K.L.2A.2. K.RN.4.1. K.RN.3.2. LA 0.1.6.D. LA 0.1.6.E. K-LS1-1. LA 0.1.6.I. LA 0.1.5.C. LA 0.1.5.B. K.RN.2.2. K.RN.2.1. K.RF.1.1. K.RI.LCS.9.1. (K.9) K-ESS3-1. K-LS1-1. O.2.1.1. RI.K.8. RF.K.4. K.8.A) 0.2.2.2. L.K.5.C. RI.K.4. RI.K.2. RI.K.8 RI.K.4 RI.K.2 RF.K.4 L.K.5C SC2. RI.K.1. L.K.6 K.7.B) K.7.C) [3] SC2.1. [3] SC1.1. [3] SA1.2. K-LS1-1. [3] SC2.2. K-LS1-1. K-LS1-1. K-LS1-1. L.K.6. K.9.C) 0.2.8.8. 0.2.4.4. K.9.B) 0.3.0.4. 0.10.5.5.C. 0.4.1.1.1. 0.10.6.6. RI.K.1 1.RF.1.1. RF.1.4.A. RI.1.10. RI.1.7. RI.1.6. [3] SC2.1. [3] SC1.1. L.1.4.A. L.1.5.C. [3] SA1.2. RI.1.4. [3] SC2.2. 1.RN.4.1. 1.RN.2.2. 1.RN.2.1. 1.RN.1.1. RI.1.1. 1.10.F) [3] SC4.1. SC2. 1.RV.1.1. RF.1.4.C. LA 1.2.1.C. 2.3.2.B. 2.3.4.A. 1.7.B) 1.7.A) 1.2.1.1. 1.2.2.2. 1.2.7.7. 1.2.6.6. 1.2.4.4. 1.4.C) 1.4.B) 1.8.C) 1.8.D) 1.8.E) 1.8.B) 1.8.A) 1.4.A) 1.1.C) 1.10.10) 1.2.8.8. 1.2.10.10. LA 1.4.1.A. 2.3.1.B. 1.10 (B) 110.12 (F) LA 1.1.6.O. LA 1.1.6.M. LA 1.1.5.C. LA 1.1.6.E. LA 1.1.6.I. 110.12 (D) 110.12 (C) 1.10.5.5.C. 1.10.4.4.A. 1.3.0.4.A. 1.1.3.1.1. 1.4 (B) 1.14 (B) 1.14 (A) 1.6 (C) LA 1.1.5.B. RI.1.2. 1.RI.MC.6.1. 1.I.3.1. 1.RI.LCS.8.1. 1.RI.LCS.9.1. 1.RI.LCS.11.2. 1.RI.LCS.9.2. 1.I.2.1. 1.LS.4. 1.RV.2.1. RI.1.7 1.RV.3.2. 1.LS.1. 1.LS.3. 1.LS.2. 1.W.MCC.2.1. RI.1.8 5.1. 1.L.5B.3. 4.2. 3.1. 2.1. 2.1. 1.L.5B.1. 1.L.5A.2. RF.1.4A RI.1.10 RF.1.4C L.1.4A 1.L.5A.1. L.1.5C RI.1.6 1.RL.LCS.10.2. RI.1.1 1-LS1-1. RI.1.4 RI.1.2 1-LS1-1. E2.RI.LCS.9.3. E2.RI.LCS.9.5. E2.RI.LCS.9.2. E2.RI.LCS.9.4. E2.RI.MC.6.1. E1.RI.MC.5.2. E1.RI.MC.6.1. E2.RI.MC.5.1. E2.RI.MC.5.2. E2.RI.LCS.8.1. E2.RI.LCS.9.1. E2.C.MC.1.1. E1.RI.MC.5.1. E1.RI.P.4.3. E1.RI.P.4.1. E3.RI.MC.5.1. E3.RI.P.4.3. E3.RI.P.4.1. E3.I.2.1. BIO.6.A) E1.I.2.1. BIO.6.E) E1.RI.LCS.9.1. E1.RI.LCS.9.3. LA 10.1.6.O. LA 10.1.6.M. LA 10.2.1.C. E3.RI.MC.5.2. LA 10.4.1.A. LA 10.1.6.I. LA 10.1.6.H. LA 10.1.5.C. LA 10.1.5.D. LA 10.1.6.E. LA 10.1.6.F. 12.3.3.A. 12.3.4.A. E1.RI.LCS.9.5. E1.C.MC.1.1. E1.RI.LCS.9.4. LA 10.1.4.A. E2.RI.P.4.3. E2.I.2.1. E2.RI.P.4.1. 10.3.F) 10.5.F) 10.5.H) BIO.4.C) E1.RI.LCS.9.2. E4.RI.P.4.1. 110.34 (B) 110.34 (A) EIV.9 (D) 110.46.1 (A) 110.47.1 (A) 110.47.3 (D) 110.47.2 (A) (EIV.8) EIV.1 (B) EIII.1 (C) EIII.1 (B) EIII.9 (B) 110.33 (A) EIV.1 (A) 110.33 (B) 110.47.4 (C) 9-11.8 (C) 110.48.2 (F) 110.48.3 (A) 110.48.4 (E) 110.48.2 (A) 110.47.8 (D) 110.47.6 (A) 110.47.6 (C) 110.48.4 (F) 110.48.5 (A) 110.55.2 (C) 9-11.8 (B) 110.54.5 (B) 110.54.5 (A) 110.48.6 (C) 110.53.3 (B) 9-11.11 (B) EIII.1 (A) E4.RI.P.4.3. 110.47.5 (B) E4.I.2.1. E4.RI.MC.5.1. E4.RI.MC.5.2. E4.RI.LCS.8.1. E4.RI.MC.6.1. E3.C.MC.1.1. E3.RI.LCS.11.2. E3.RI.LCS.9.1. E3.RI.LCS.8.1. E3.RI.LCS.9.2. E3.RI.LCS.9.3. E3.RI.LCS.9.5. E3.RI.LCS.9.4. E4.RI.LCS.9.1. E4.RI.LCS.9.2. EII.1 (C) EII.1 (A) 110.31 (B) (EII.8) EII.9 (B) 110.32 (B) 110.32 (A) 110.31 (A) (EI.8) E4.RI.LCS.9.4. E4.RI.LCS.9.3. E4.RI.LCS.9.5. E4.RI.LCS.11.2. EI.1 (A) E4.C.MC.1.1. E3.RI.MC.6.1. BIO.6.C) L.9-10.4.D. W.9-10.8 [10] SC2.1. L.9-10.4.A. W.9-10.8. 9.5.4.4. 9.5.2.2. 9.5.1.1. L.9-10.4D L.9-10.6 RI.9-10.4 L.9-10.6. SC2. RI.9-10.2 RI.9-10.1 9-10.RN.2.1. 9-10.RN.1.1. 9-10.RN.2.2. L.9-10.4A 9.11.6.6. 9.11.4.4.D. RI.9-10.4. RI.9-10.2. 9-10.RV.1.1. RI.9-10.1. 9.11.4.4.A. HS-LS2-2. 9-10.RV.2.2. 9.7.8.8. 9-10.RV.2.1. ENV.5.2. ENV.1.1. ENV.5.6. E2.RI.P.4.3. E2.RI.P.4.1. 11.7.8.8. E2.I.2.1. E2.RI.MC.5.1. E2.RI.LCS.9.1. 110.31 (A) 11.11.4.4.A. E2.RI.LCS.8.1. E2.RI.MC.5.2. RI.11-12.4 (EI.8) EI.1 (A) RI.11-12.2 RI.11-12.1 W.11-12.8 L.11-12.4A 11.11.6.6. L.11-12.6 L.11-12.4D 11.11.4.4.D. E3.RI.MC.5.2. E4.RI.P.4.3. E4.RI.MC.5.1. E4.RI.MC.5.2. E4.RI.P.4.1. E4.I.2.1. E3.RI.LCS.11.2. E3.C.MC.1.1. E4.RI.MC.6.1. E4.RI.LCS.8.1. E4.RI.LCS.9.5. E4.RI.LCS.11.2. E4.RI.LCS.9.4. E4.RI.LCS.9.3. E4.RI.LCS.9.1. E4.RI.LCS.9.2. E3.RI.LCS.9.5. E3.RI.LCS.9.4. E3.I.2.1. E3.RI.P.4.1. E2.C.MC.1.1. E2.RI.LCS.9.5. E2.RI.LCS.9.3. E2.RI.LCS.9.4.