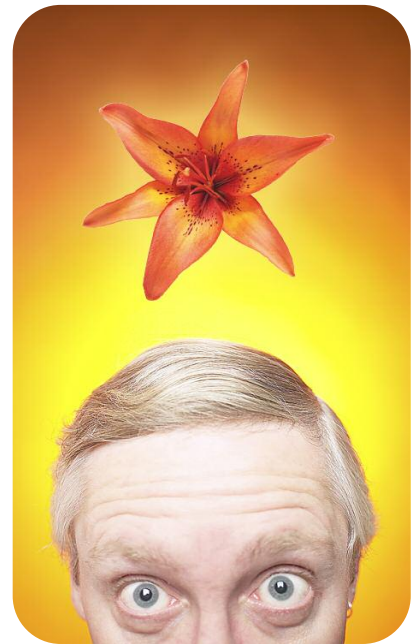


What's Your Care and Handling IQ?

Whether taken just for fun or used as a training tool, this teaching quiz is designed to educate—not berate or intimidate.



1. The growth of flower-stem-plugging bacteria can be reduced by cleaning flower buckets, cutting tools, workbenches and countertops, and coolers with:

- a. a professional cleaner/disinfectant made specifically for use in flower shops (*Chrysal Professional Cleaner, Floralife® D.C.D.® Cleaner, Syndicate Sales Fresh-n-Clean®*)
- b. a solution of one part chlorine bleach and 10 parts water
- c. a household sanitizing spray (*Clorox®, Fantastik®, Lyso®, etc. disinfecting cleaners*)
- d. disinfecting/antibacterial wipes (*Clorox®, Lyso®, etc.*)
- e. any of the above

2. When flowers arrive in your store, you should immediately check the temperature inside the boxes or the temperature of the water in wet packs with a needle thermometer. The temperature should be no higher than:

- a. 40 F
- b. 45 F
- c. 50 F
- d. 55 F

3. If you cannot unpack flowers immediately upon their arrival in your shop, you should:

- a. open the boxes and leave them at room temperature
- b. place the boxes unopened in a floral cooler at 33 F to 35 F

4. As you process flowers, it is best to remove all sleeves and bindings.

- True
- False

5. To remove dried-out stem ends as well as dirt, debris and microbes in the stem cells, how much of the stems should you cut off?

- a. ½ inch to 1 inch
- b. between 1 inch and 3 inches
- c. 3 inches or more

6. The difference between hydration solutions and flower foods is:

- a. hydration solutions do not contain a nutrient (sugar)
- b. flower foods do not contain a wetting agent to accelerate water uptake
- c. both A and B
- d. none of the above

7. Mixing flower-food solutions to the proper concentrations is really not too important; it is simply a ploy by the manufacturers to sell more product.

- True
- False

8. Why is it important to use bulb-flower-specific flower foods with cut bulb flowers?

- a. Bulb flower foods contain plant hormones to replace those that bulb flowers lose when they're harvested.
- b. Bulb flower foods have less sugar than standard flower foods, and sugar can aggravate leaf yellowing in bulb flowers.
- c. both A and B
- d. none of the above

9. Some bulb flowers do not benefit greatly from the nutrients in flower foods, so it's not necessary to place these flowers into flower-food solutions.

- True
- False

10. Many flower care authorities recommend placing bulb flowers into cold flower-food solutions.

- True
- False

11. All species of Narcissi (daffodils, paper-whites, etc.) should be isolated from other bulb flowers for a time following processing.

- True
- False

12. Most flowers (except tropical flowers and some bulb flowers) should be placed into a floral cooler at 33 F to 35 F immediately after processing rather than left out at room temperature to hydrate.

- True
- False

13. Most tropical flowers should be stored at what temperatures?

- a. 45 F to 49 F
- b. 50 F to 55 F
- c. 60 F or higher
- d. room temperature

14. Except for design time, you should always keep flowers refrigerated until sold or delivered.

- True
- False

15. You should check your cooler temperature every two days.

- True
- False

Answers on Page 00.

Visit www.floristsreview.com for a downloadable version of this quiz that you can use for training purposes.

What's Your Care and Handling IQ? Answers

1. **E.** All of the products/solutions mentioned will kill bacteria; however, the professional cleaners made specifically for use in flower shops are, perhaps, the most effective and easiest to use. Flower buckets and other containers must be sanitized between every use, and cutting tools and work surfaces should be cleaned at least once daily. The important points are to *clean buckets, tools and surfaces regularly and thoroughly* and to *rinse buckets well after cleaning and allow them to air dry before stacking*.
2. **A.** If temperatures are higher than 40 F, inspect the flowers carefully for insects, *Botrytis*, wilted blooms or leaves, yellow leaves, and bloom or leaf drop. If you find any of these conditions, contact the supplier immediately.
3. **B.** It is crucial that flowers be processed immediately upon their arrival in your shop; however, if it absolutely is not possible, the flowers should be refrigerated until they are processed.
4. **True.** You may leave sleeves on flower bunches for a few hours to prevent damage to the blooms or to help straighten stems, but you must remove them eventually to promote air circulation among the blooms and bunches.
5. **B.** Dried-out stem ends and stem-plugging dirt and microorganisms are generally confined to the first 1 inch to 3 inches of the stem ends. Make the cuts under *clean* water or in air, with a clean, sharp knife or pruner. If you cut flowers under water, you should change the water (or, preferably, the flower-food solution) *frequently* because the removed stem ends can quickly contaminate the water or solution. Otherwise, it is more beneficial to cut flower stems in air.
6. **C.** In addition to *bactericides*, which control microbial growth, and *acidifiers*, which lower the solution pH, hydration solutions contain a *wetting agent*, to accelerate water uptake, and flower foods contain a *nutrient* (sugar).
7. **False.** If not mixed to proper concentrations, flower foods can actually decrease flowers' vase life. Both too much and too little are harmful. It's also important that, for most flowers (except bulb flowers, for example), flower foods be mixed with lukewarm (100 F to 110 F) water.
8. **C.** When they are cut from their bulbs (their food-storage organs), bulb flowers experience hormone imbalances that cause premature leaf yellowing, non-opening blooms, loss of color and reduced vase lives. Bulb-flower-specific nutrient solutions (e.g., *Chrysal Clear Professional Bulb T-Bag™* and *Floralife® Bulb Flower Food*) contain—in addition to the ingredients found in standard flower-food solutions—naturally occurring plant hormones (or *plant growth regulators, PRGs*), and they have a lower concentration of sugar, which can aggravate leaf yellowing. These solutions should be prepared with nonfluoridated water.
9. **False.** While laboratory studies show that some bulb flowers (tulips, daffodils, *Irises*, *Agapanthuses*, *Anemones* and callas) may not benefit from the nutrients in flower-food solutions, they do benefit from the bactericides contained within; therefore, flower foods always should be used with these flowers, particularly bulb-flower-specific flower foods.
10. **True.** Flower-food solutions made with cold water help prevent bulb flowers from opening too quickly.
11. **True.** When cut, *Narcissi* exude a gelatinous substance that is detrimental to the vase life of some other flowers, especially tulips and *Anemones*. Keep them in separate containers for several hours after cutting them. After that time, the harmful sap will have leached, and the flowers can be arranged or placed with other flowers, even if recut again.
12. **True.** Research shows that maintain-
- ing most flowers (except for tropical flowers, paper-whites and amaryllises) at 33 F to 35 F is crucial to extending vase life. The flowers will hydrate in the cooler, and they should be placed there for at least two hours before designing with or selling them.
13. **B.** Most true tropical flowers, including birds-of-paradise, gingers, *Anthuriums*, *Heliconias* and some orchids, require storage temperatures between 50 F and 55 F. Temperatures lower than 50 F can cause chill damage. If these refrigeration requirements can't be met, the flowers should be stored outside the cooler, at room temperature.
14. **True.** Keeping flowers cold slows their respiration (moisture loss); helps them maintain their carbohydrate reserves, their fuel for vase life; and decreases their sensitivity to ethylene.
15. **False.** Many flower care authorities suggest checking the temperature in your cooler twice *daily*. The best method is to place a thermometer in a container of water that sits in the cooler. Keep your cooler set to maintain bucket solutions in the 33 F to 35 F range.