A green chemistry quiz for St. Patrick's Day

Which of the following are green?

- 510 nm or 600 nm
- Bromothymol blue in a basic solution or a neutral solution
- Copper(II) chloride dihydrate or copper(II) oxide
- $BaCl_2$ salt or $CaCl_2$ salt in fireworks
- Flame test for boron or sodium
- Hematite or malachite
- Al_2O_3, with Cr^{3+} replacing a few Al^{3+} in octahedral sites or $Be_3Al_2(SiO_3)_6$, with Cr^{3+} replacing a few Al^{3+} in octahedral sites
- Potassium ferric oxalate trihydrate or cupric sulfate pentahydrate crystals
- Copper arsenite or cadmium sulfide paint (we would not suggest painting your room with either)
- $C_{37}H_{34}N_2Na_2O_{10}S_3$ or $C_{37}H_{34}N_2Na_2O_9S_3$ (note the small difference in compound but a difference in colour)
- Universal pH test paper dipped in a weak alkaline or strong acid solution
- Chlorophyll under ultraviolet light or chlorophyll under visible light (front cover of this issue)

Reprinted from March 2007 issue of *Chem 13 News* with more comparisons added to challenge your students and you.