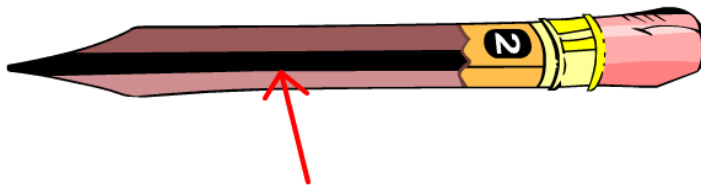


Understanding Pencil Leads: Hardness, Grades & Uses

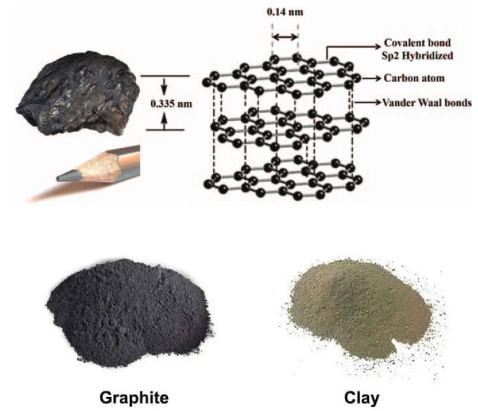
A quick, illustrated guide to lead composition, hardness grades, and how to pick the right pencil for your task.

1. What is Pencil "Lead"?

Pencil cores are made from graphite mixed with clay (plus binders). More clay makes the core harder and lighter; more graphite makes it softer and darker.

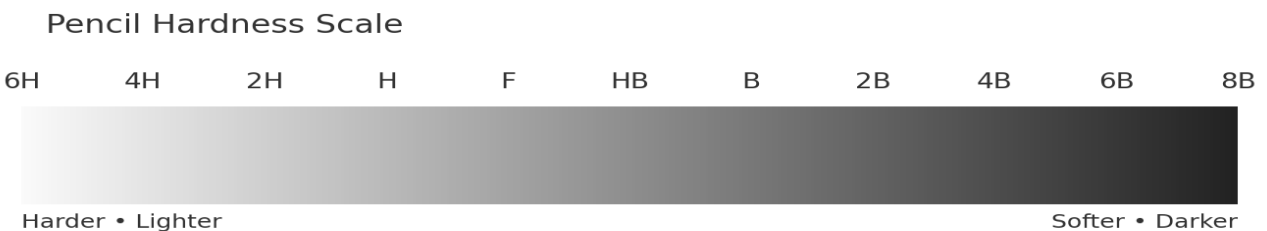


The "lead" in a pencil is actually graphite mixed with clay.



2. The Grading System

In the HB system, H = hard, B = soft/darker, F = fine, and HB sits in the middle. Higher H numbers are harder; higher B numbers are softer.



3. Typical Grades & Uses

Hard (H grades): Light lines, sharp point — drafting, detail work. **Medium (HB/F):** Balanced — everyday writing, general sketching. **Soft (B grades):** Dark, rich — shading and expressive drawing.

4. Quick Reference

Grade	Feel & Mark	Suggested Use
4H–6H	Very hard, light mark	Technical drawing, faint lines
H / 2H	Hard, lighter mark	Precise line work, fine detail
F / HB	Medium	General writing, everyday tasks
B / 2B	Soft, darker mark	Sketching, freehand drawing
4B–6B+	Very soft, very dark	Rich shading, expressive art

Create a very light mark.
Perfect for for technical drawing, outlines,
light sketches and guide lines.

4H

2H

Commonly Used, great for writing
and drawing simple sketches.

HB

2B

3B

Extra soft, very black graphite.
ideal for artistic, pictorial drawing,
tonal modeling and shading.

4B

5B

6B

8B

Softest and darkest graphite pencils.
for shading and creating a sense of
three-dimensional form by graduations
of tone. Blends particularly well.

10B

12B

