

COFFEE ROAST STAGES → FLAVOUR OUTCOMES

One-page teaching reference (A4)

Drying Phase (Green → Yellow)

Moisture evaporates. No coffee flavour yet. Sets the foundation for even roasting. Poor control can result in baked or hollow cups.

Maillard Phase (Yellow → Light Brown)

Sugars and amino acids react to create sweetness, body, and complexity. Aromas include bread, toast, and malt.

First Crack (Light Roast Threshold)

Beans expand as internal steam ruptures cell walls. Bright acidity, floral and fruit notes, and high origin clarity appear.

Early Development (Light–Medium Roast)

Controlled caramelisation smooths acidity and increases sweetness. Common flavours include citrus, apple, honey, and light caramel.

Mid Development (Medium Roast)

Deeper caramelisation produces chocolate, nut, and caramel notes. Acidity softens and body increases.

Late Development (Medium–Dark Roast)

Oils migrate toward the surface. Flavours shift to cocoa, molasses, and toasted sugar. Origin character begins to fade.

Second Crack & Beyond (Dark Roast)

Cellulose breaks down and surface oils appear. Dominant flavours are smoke, char, bitter chocolate, and ash. Origin is largely lost.

Roast Level	Acidity	Sweetness	Body	Typical Flavours
Light	High	Moderate	Light	Floral, citrus, fruit
Light–Medium	Balanced	High	Medium	Fruit, honey, caramel
Medium	Moderate	High	Medium–Full	Chocolate, nuts
Medium–Dark	Low	Moderate	Full	Cocoa, molasses
Dark	Very Low	Low	Heavy	Smoke, ash