

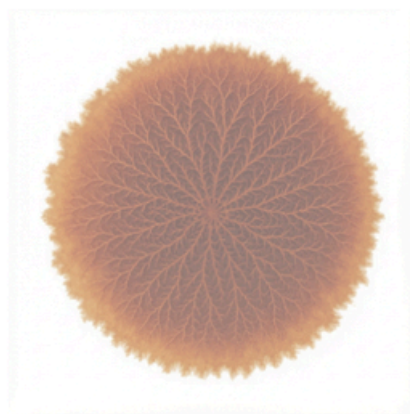
Reactive Surface Experiments (RSE)

Classroom Field Kit

A Shared Laboratory

Reactive Surface Experiments — Commons Edition

Program 6 — Substrate & Surface Condition



Program 6 — Substrate & Surface Condition

What the Reaction Meets Shapes What It Becomes

Purpose of This Program

This program focuses on the role of the substrate and its surface condition in reactive surface experiments. Participants observe how differences in absorbency, preparation, and surface history influence reactive behavior.

Surfaces that appear similar may behave differently. Subtle variations in density, compression, moisture, or preparation can determine whether a reaction spreads, stalls, or collapses.

The goal is not to standardize the surface. The goal is to notice its influence.

What This Program Explores

Participants compare how the same reactive setup behaves across different surface conditions.

Typical comparisons may include:

- Dry vs pre-wetted surfaces
- Smooth vs textured areas
- Uniform vs uneven preparation
- Different paper batches or sources

Chemistry, dilution, application, and environment are held constant. Only the surface condition is allowed to change.

Suggested Approach

Prepare surfaces with intentional variation.

Apply the same reactive solution in the same manner to each surface.

Observe:

- Differences in entry speed
- Variations in migration
- Areas of resistance or denial
- Evidence of surface memory

Participants are encouraged to treat unexpected differences as data rather than error.

What to Pay Attention To

When documenting this program, give particular attention to:

- Surface condition at time of application
- Preparation notes
- Localized differences in behavior
- Repeat responses on the same surface

The surface is not a passive receiver. It participates.

Why This Program Comes Sixth

Once procedural variables are understood, the surface itself becomes visible as an active contributor. This program prepares participants to recognize that reactive work begins before chemistry is applied.



Experiment Title: _____

Section A — Experiment Identification

Field	Entry
Program Type	<input type="checkbox"/> Law of Entry <input type="checkbox"/> Dilution <input type="checkbox"/> Time-Series <input type="checkbox"/> Atmosphere <input type="checkbox"/> Application <input type="checkbox"/> Substrate <input type="checkbox"/> Failure <input type="checkbox"/> Edge <input type="checkbox"/> Repeatability <input type="checkbox"/> Open
Date	_____
Contributor / Class Code	_____

Small type note: Not all fields are required. Record what is known.

Section B — Reactive Chemistry

Field	Entry
Reactive Substance (chemical name)	_____
Solution Type	<input type="checkbox"/> Aqueous <input type="checkbox"/> Other
Dilution / Concentration	_____

Section C — Substrate & Surface Condition

Field	Entry
Substrate Type	<input type="checkbox"/> RSE Paper <input type="checkbox"/> Other
Paper Batch / Source (if known)	_____
Surface Condition	<input type="checkbox"/> Dry <input type="checkbox"/> Pre-wet <input type="checkbox"/> Other
Surface Preparation Notes	_____

Section D — Application & Entry Method

Field	Entry
Method of Application	<input type="checkbox"/> Brush <input type="checkbox"/> Mist <input type="checkbox"/> Cascade <input type="checkbox"/> Submersion <input type="checkbox"/> Other
Estimated Volume	<input type="checkbox"/> Drops <input type="checkbox"/> mL <input type="checkbox"/> Light <input type="checkbox"/> Heavy
Application Speed / Notes	_____

Reactive Patinas™ — RSE Program

Not everything needs to be explained. Some things only need to be observed — together.



Section E — Environment

Field	Entry
Ambient Temperature	_____ °C / °F
Ambient Humidity	_____ % / <input type="checkbox"/> Low <input type="checkbox"/> Med <input type="checkbox"/> High
Drying Condition	<input type="checkbox"/> Open Air <input type="checkbox"/> Boxed <input type="checkbox"/> Covered <input type="checkbox"/> Forced

Entry determines reaction. Everything above describes what was allowed to enter.

OBSERVATION & INTERPRETATION

(What happened, when, and how it was perceived)

This page privileges **language and attention**, not correctness.

Section F — Time & Change

Field	Entry
Time to First Visible Change	<input type="checkbox"/> Seconds <input type="checkbox"/> Minutes <input type="checkbox"/> Hours <input type="checkbox"/> Unknown
Total Observation Duration	_____

Section G — Visual Outcome (Descriptive, Not Evaluative)

Color Description (words, not codes):

Pattern / Behavior Observed:

- Bloom
- Migration
- Edge Darkening
- Collapse
- Uniform
- Other: _____

Uniformity:

- Even Uneven Localized

Section H — Unexpected or Partial Outcomes

No

Yes → Describe:

<p><i>Unexpected results are valid data.</i></p>



Section I — Images (Uploaded Separately)

Field	Entry
Image Type	<input type="checkbox"/> Still <input type="checkbox"/> Time Series
Image Timing	<input type="checkbox"/> Immediate <input type="checkbox"/> Delayed <input type="checkbox"/> Multiple
Notes on Images	_____

Section J — Confidence & Uncertainty

Field	Entry
Confidence in Recorded Data	<input type="checkbox"/> High <input type="checkbox"/> Moderate <input type="checkbox"/> Low
Known Unknowns / Estimates	_____

Section K — Open Notes & Questions