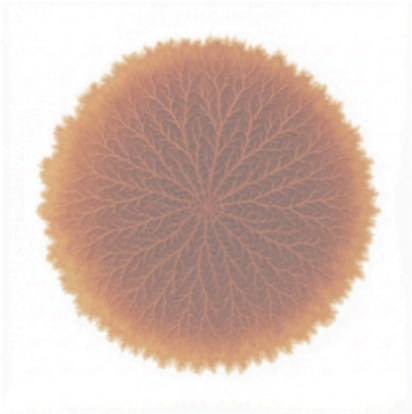
Reactive Surface Experiments (RSE)

Classroom Field Kit

A Shared Laboratory

Reactive Surface Experiments — Commons Edition

Program 3 — Time-Series Observation



Program 3 — Time-Series Observation

When Reaction Is Not Immediate

Purpose of This Program
This program introduces time as an active dimension in reactive surface experiments. Participants learn to observe reactions not only at the moment of application, but as they unfold, pause, reappear, or transform over extended periods.

Many reactive effects do not announce themselves immediately. This program trains attention toward **latency**, **delayed development**, and **post-dry change**.
The goal is not to capture a single image. The goal is to observe change over time.

What This Program Explores
Participants document how a single experiment evolves across multiple time points.

Typical observations may include:
- Immediate vs delayed color appearance
- Changes after visible wetness disappears
- Continued development hours or days later
- Differences between early and late pattern structure

Chemistry, dilution, and application are held constant. Only time is allowed to move.

Suggested Approach
Conduct a single reactive application under stable conditions.

Observe and record at multiple intervals:
- Immediately after application
- After drying
- Several hours later
- The following day (or longer, if appropriate)

Photographs may be taken, but written observations are equally important.

Participants are encouraged to avoid disturbing the surface between observations unless the disturbance itself is part of the record.

What to Pay Attention To

When documenting this program, give particular attention to:
- Time to first visible change
- Moments of apparent inactivity
- Secondary or delayed color emergence
- Differences between early and final appearance

What seems finished may not be complete. What seems inactive may still be reacting.

Why This Program Comes Third

After entry and dilution, time becomes the next invisible variable.

This program introduces patience as a technical skill and establishes that reactive systems cannot always be judged at first glance.

Reactive Surface Experiments (RSE)
Lab Sheet — Community Submission

Lab Sheet Code

QR placeholder

Experiment Title: _____

Section A — Experiment Identification

Field	Entry
Program Type	☐ Law of Entry ☐ Dilution ☐ Time-Series ☐ Atmosphere ☐ Application ☐ Substrate ☐ Failure ☐ Edge ☐ Repeatability ☐ 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	☐ Aqueous ☐ Other
Dilution / Concentration	_____

Section C — Substrate & Surface Condition

Field	Entry
Substrate Type	☐ RSE Paper ☐ Other
Paper Batch / Source (if known)	_____
Surface Condition	☐ Dry ☐ Pre-wet ☐ Other
Surface Preparation Notes	_____

Section D — Application & Entry Method

Field	Entry
Method of Application	☐ Brush ☐ Mist ☐ Cascade ☐ Submersion ☐ Other
Estimated Volume	☐ Drops ☐ mL ☐ Light ☐ Heavy
Application Speed / Notes	_____

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	_____ % / □ Low □ Med □ High
Drying Condition	□ Open Air □ Boxed □ Covered □ 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	□ Seconds □ Minutes □ Hours □ 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:

Unexpected results are valid data.

Section I — Images (Uploaded Separately)

Field	Entry
Image Type	□ Still □ Time Series
Image Timing	□ Immediate □ Delayed □ Multiple
Notes on Images	_____

Section J — Confidence & Uncertainty

Field	Entry
Confidence in Recorded Data	□ High □ Moderate □ Low
Known Unknowns / Estimates	_____

Section K — Open Notes & Questions