

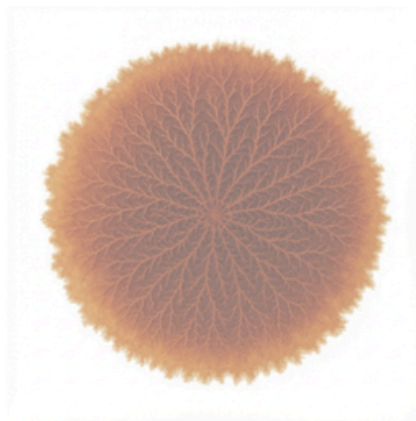
# Reactive Surface Experiments (RSE)

## Classroom Field Kit

A Shared Laboratory

Reactive Surface Experiments — Commons Edition

## Program 8 — Failure & Non-Reaction



# Program 8 — Failure & Non-Reaction

## *When Nothing Happens*

### **Purpose of This Program**

This program reframes failure and non-reaction as valid and instructive outcomes in reactive surface experiments. Participants learn to document absence, hesitation, or collapse without attempting correction.

In reactive work, the absence of visible change is often treated as error. This program establishes that non-reaction is evidence — particularly evidence of denied entry, arrested movement, or incompatible conditions.

The goal is not to force a reaction. The goal is to understand why one did not occur.

### **What This Program Explores**

Participants intentionally observe situations where reaction is weak, uneven, delayed, or absent.

#### **Typical scenarios may include:**

- Surfaces that resist entry
- Dilutions below visible threshold
- Rapid arrest due to drying
- Incompatible surface conditions

Chemistry, dilution, and method may remain unchanged. The outcome is allowed to fail.

### **Suggested Approach**

Conduct an experiment without adjusting conditions to “fix” the result.

#### **If no visible change occurs:**

- Record the outcome clearly
- Note surface condition and timing
- Resist increasing strength or repeating immediately

Participants are encouraged to document disappointment, uncertainty, and surprise as part of the record.

### **What to Pay Attention To**

#### **When documenting this program, give particular attention to:**

- Where reaction was expected but absent
- Whether entry was achieved
- Timing of observation
- Environmental or surface factors that may have contributed

Nothing happened is a result. Failure is information.

### **Why This Program Comes Eighth**

After learning how reactions behave under controlled variation, this program establishes the ethical foundation of the field.

Without the ability to record failure, comparison becomes distorted and understanding stalls.



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"/><br>Atmosphere <input type="checkbox"/> Application <input type="checkbox"/> Substrate <input type="checkbox"/> Failure <input type="checkbox"/><br>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.*

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## OBSERVATION & INTERPRETATION

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(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**