TBD Testing Migration

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- Jest
  - Easy migration. Migrate in one CLI command:
    - **Migrating to Jest · Jest**
      If you'd like to try out Jest with an existing codebase, there are a number of ways to convert...
      https://jestjs.io/docs/migration-guide
  - Faster than Vitest. Can be bundled with esbuild for super fast performance. Outperforms tsc.
    - **Vitest runs tests 3x slower than Jest with threads: true (default) setting #579**
      https://github.com/vitest-dev/vitest/issues/579
    - **Vitest is not ready to replace Jest (and may never be)**
      I recently had an opportunity to try to improve the build-times for some client software. Afte...
      Publisher **Medium**   Author **Brett Uglow**   Published **1/2/2023**
    - Even faster than bare TSC when using esbuild transformer
      - **Speed up TypeScript with Jest | miyauci.me**
        Learn how to speed up your tests with Jest. Introducing esbuild or swc as transformers...
        Author **Tomoki Miyauchi'**
  - Similar to what we already have (mocha/chai)
  - Popular. Huge network of tools, plugins, etc.
  - Familiar. People are used to working with it.
  - Option of using `jsdom` (or newer `happydom`) rather than relying on real browser
  - Parallel execution works well on CI from experience
  - Compatible with react native
  - Compatible with future `bun test`
  - Native ESM support is coming
- bun
  - high performance (supposedly)
  - non standard
  - too early
- Web Test Runner
  - "web native" but requires both esbuild AND rollup. very weird half esbuild half rollup config. not intuitive despite hoping to be.
  - most uncommon
- Vitest

- same exact problems as web test runner. does not support esbuild's bundling API. only single file transforms. this is low performance.
- If you're working with heavy libraries and barrel files don't use Vitest, it's slow